DESIGN OF A SEDIMENT DATA-COLLECTION PROGRAM IN KANSAS AS AFFECTED BY TIME TRENDS

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Mult	iply inch-pound unit	<u>By</u>	To obtain SI unit
mile		1.609	kilometer
squa	re mile	2.590	square kilometer

0.02832

cubic meter per second

cubic foot per second

DESIGN OF A SEDIMENT DATA-COLLECTION PROGRAM IN KANSAS AS AFFECTED BY TIME TRENDS

Ву

P. R. Jordan

ABSTRACT

Data-collection programs need to be re-examined periodically in order to insure their usefulness, efficiency, and applicability. The possibility of time trends in sediment concentration, in particular, makes the examination with new statistical techniques desirable.

After adjusting sediment concentrations for their relation to streamflow rates and by using a seasonal adaptation of Kendall's nonparametric statistical test, time trends of flow-adjusted concentrations were detected for 11 of the 38 sediment records tested that were not affected by large reservoirs. Ten of the 11 trends were toward smaller concentrations; only 1 was toward larger concentrations. Of the apparent trends that were not statistically significant (0.05 level) using data available, nearly all were toward smaller concentrations. Because the reason for the lack of statistical significance of an apparent trend may be inadequacy of data rather than absence of trend and because of the prevalence of apparent trends in one direction, the assumption was made that a time trend may be present at any station. This assumption can significantly affect the design of a sediment data-collection program.

Sudden decreases (step trends) in flow-adjusted sediment concentrations were found at all stations that were short distances downstream from large reservoirs and that had adequate data for a seasonal adaptation of Wilcoxon's nonparametric statistical test.

Examination of sediment records in the 1984 data-collection program of the Kansas Water Office indicated 12 stations that can be discontinued temporarily because data are now adequate. Data collection could be resumed in 1992 when new data may be needed because of possible time trends. New data are needed at eight previously operated stations where existing data may be inadequate or misleading because of time trends. Operational changes may be needed at some stations, such as hiring contract observers or installing automatic pumping samplers. Implementing the changes in the program can provide a substantial increase in the quantity of useful information on stream sediment for the same funding as the 1984 level.

INTRODUCTION

Data-collection programs need to be re-examined periodically in order to insure their usefulness, efficiency, and applicability. The sedimentdata program in Kansas receives a cursory examination each year in connection with decisions on funding and current data needs. Nineteen years have elapsed since publication of the last Statewide evaluation of the sediment-data program (Collins, 1965), although a partial program evaluation in the Arkansas River basin was included in a 1977 publication (Osterkamp, 1977a). Since those evaluations, the sediment data at many of the currently operated (1984) stations may have become adequate to justify discontinuing data collection at those stations for several years. large reservoirs have been completed along with hundreds of farm ponds and watershed-district reservoirs. Changes in farming practices have occurred that either may have decreased or increased erosion and stream-sediment concentrations at different locations in the State. Statistical techniques that have become available recently are more capable of detecting time trends from the existing data than previous techniques.

Purpose and Scope of this Investigation

The purpose of this investigation is to use information on time trends, together with other information on sediment data, to design modifications to the cooperative sediment-data program with the Kansas Water Office. The investigation was funded jointly by the Kansas Water Office and the U.S. Geological Survey. The investigation focused primarily on suspended-sediment concentration and secondarily on suspended-sediment particle size. Bed-material particle size was included in the inventory of existing data but was not used in evaluating the data program. Because bed-material particle size does not change as rapidly with time as does suspended-sediment concentration and particle size, bed-material data can be assumed to be adequate if suspended-sediment data are adequate.

Major Changes in Kansas Sediment-Data Programs

A few analyses of suspended-sediment concentration were obtained during the first decade of the 20th century in Kansas in connection with chemical analyses of samples from the Missouri and Kansas Rivers. Systematic programs of sediment-data collection began during the late 1930's in connection with studies for Federal reservoir design. Sample collection and analysis improved markedly beginning in the early 1940's as a result of a Federal interagency project to develop improved equipment for sampling and laboratory analysis. A typical example of a report by the interagency project is one on improved samplers (Subcommittee on Sedimentation, 1952b). Sediment-data programs in Kansas were almost entirely Federally funded until 1957 when the Kansas Water Resources Board (now the Kansas Water Office) began an extensive program in cooperation with the U.S. Geological Survéy.

Before about 1957, most sediment data were collected by Federal agencies at the sites of proposed Federal reservoirs for the purpose of providing data for design of the reservoirs. After its formation in 1955, the Kansas Water Resources Board, in cooperation with the U.S. Geological Survey, undertook a program to provide sediment data for broader and more general knowledge. After a few years of the new program, all the data available at the time were studied, and a new data-collection program was designed (Mundorff, 1961). Design of sediment-data programs was furthered by a study, principally based on knowledge of soil characteristics and geology, that classified source areas of sediment within the State (Collins, 1965). Southern Kansas was included in the sediment data-collection network as recommended by a Federal interagency group for the Arkansas, Red, and White River basins (Sedimentation Work Group, The most recently published data-collection recommendations were included in a report on sediment in the Arkansas River basin in Kansas (Osterkamp, 1977a). Time trends of sediment discharge or concentration in Kansas have not been previously studied.

INVENTORY OF EXISTING SEDIMENT DATA

Published and unpublished sources of data were searched in order to compile an inventory of available sediment data through water year 1983 (table 5 at the end of this report). Because many sediment stations were operated on somewhat irregular schedules, this inventory provides useful information by listing the number of measurements of each type in each year. However, many published records of daily suspended-sediment concentrations and discharges, or both, were developed from graphs of concentration or sediment discharge versus time based on samples collected more or less frequently than daily. Although these records are shown as daily records, far less than 365 samples may have been collected during the year, and for some periods the concentrations or discharges may not have been shown for each day but as averages for periods of a few days to a month.

Much of the data identified in the inventory for this investigation are stored on the U.S. Geological Survey's WATSTORE (water-data storage and retrieval) system and can be retrieved by individual station number. range of station numbers, or areal polygon identified by coordinates of latitude and longitude. The inventory is arranged generally by eightdigit station numbers, which are in downstream order. Sites not identified by station number also are arranged in downstream order with the eight-digit numbered stations. Some stations, identified by 15-digit numbers which represent the latitude and longitude, are found in two groups in table 5 (at the end of this report). One group is at the end of the Missouri River basin stations (following the eight-digit station numbers that have 06 as the first two digits), and the other group is at the end of the Lower Mississippi (Arkansas) River basin stations (following the eight-digit station numbers that have 07 as the first two digits).

The first 6 of the 15 digits denote the latitude with 2 digits each for degrees, minutes, and seconds. The next seven digits denote the longitude with three digits for degrees and two digits each for minutes and seconds. The last 2 of the 15 digits denote the sequence number, zero except when 2 or more data-collection sites (not necessarily sediment stations) are identified by the same latitude and longitude.

Although many published and unpublished sources of data were searched, the inventory may have some omissions, overcounts of numbers of analyses, or other errors. Where more than one source of data is listed for any year, any of the sources may or may not contain all the data. Some sources of data did not describe the exact location of each station, and the inventory may list data from different locations on a stream under a single station's listing. Listings of data outside Kansas may be less accurate and less complete than those within Kansas. The listings outside Kansas were provided to aid in obtaining data that may be useful for interpolating sediment characteristics for unsampled sites. The inventory is stored on a computer file for efficiency in making corrections and updates.

In addition to stream-sediment data, data on sediment deposition in reservoirs are available from numerous surveys. Such data for reservoirs and ponds in Kansas and on streams flowing into Kansas are contained in the following references:

Committee on Sedimentation, 1969; Committee on Sedimentation, 1973; Dendy and Champion, 1969; Hansen and others, 1949; Hill and Gow, 1955; Holland, 1971; Subcommittee on Sedimentation, 1957; U.S. Army Corps of Engineers, 1961; U.S. Army Corps of Engineers, 1963; U.S. Army Corps of Engineers, 1972a; and U.S. Bureau of Reclamation, 1950.

TIME TRENDS OF SEDIMENT CONCENTRATION

Sediment concentration in a stream varies in response to many factors, but time per se is not one of them. It is because of a lack of exact knowledge of the physical relationships that affect sediment concentration and a lack of detailed data on the conditions in a drainage basin and stream, which are continually changing, that attempts are made to determine trends of sediment concentration with respect to time. known that, within a year, sediment concentrations respond to changes in precipitation and to seasonal changes in the condition of the land in a drainage basin and that some changes extend for a number of years. responses are called "time trends." An example of a gradual time trend would be a gradual decrease of sediment concentration because of completion of a few watershed-district flood-detention structures in a drainage basin each year for a number of years. Another example would be a gradual increase in sediment concentration because of conversion of rangeland to row crops each year for several years. In contrast to a gradual trend, the immediate decrease of sediment concentration downstream from a large reservoir when it begins storage would be an example of a sudden or "step trend."

Design of data-collection programs can be affected by knowledge of time trends. A record of sediment concentrations and discharges at a site for 1941-54 might be sufficient to satisfy needs for planning or design in 1984 if there is no time trend, but the record may be completely inadequate or misleading if there has been a time trend.

Knowledge of relations of time trends to changes in physical characteristics of a drainage basin would be desirable but is sometimes impractical to obtain. For example, it would be extremely difficult to compile yearly data on all land-use changes in a drainage basin of 2,000 square miles. In contrast, some relations are easy to obtain; a large reservoir a short distance upstream from a sediment-data-collection station undoubtedly has an effect that overshadows any other factor.

Even in the absence of knowledge of the causes of a time trend, knowledge of the existence of a time trend is valuable in the design of a datacollection program. In this report, because the emphasis is on design of a data program, principal emphasis on time trends will be on their presence or absence rather than on their causes.

Criteria for Selecting Data-Collection Stations for Trend Analysis

If sediment concentrations at a data-collection station have had a time trend, detection depends on the availability of adequate data during the time of the trend. Because the time trend of interest is one of several years, the data available need to be for several years. sediment concentrations are extremely variable within a year, the measurements need to include a considerable range of concentrations, and numerous measurements during each year are desirable. The data need to be suitable for an unbiased determination of the average relation between sediment concentration and streamflow rate. The best indication of an unbiased relation would be the availability of samples collected throughout a wide range of streamflow rates in both early and late years, whereas samples collected only within a small range of streamflow rates in either early or late years would result in a biased relation. For the purpose of detecting a trend, measurements of sediment concentrations need not be available in every year. The absence of data in some middle years of a period may decrease but not eliminate the chance of detecting the trend.

For the purpose of this report, selection of sediment stations for trend analysis was made according to the following criteria:

- (1) Measurements of sediment concentrations were available for at least 8 years from the first to the last year; however, some middle years could be without data. Data were assumed to be equally accurate in all years.
- (2) Data available included at least 30 days when sediment concentrations and streamflow rates were determined.

(3) If the station had near the minimum number of concentration determinations, the first 3 years and the last 3 years had at least 4 determinations each.

In addition, if the available data appeared biased, the results were discounted.

Method of Analysis

This investigation used nonparametric tests for detection of time trends as described by Crawford and others (1983). Most of the earlier trend-detection methods were, as explained by Crawford and others (1983, p. 2), "...based on classical (parametric) hypothesis testing. However, because of the nature of water-quality data (typically skewed, serially correlated, and showing seasonality), many of the assumptions underlying classical hypothesis tests are not met, rendering them inappropriate.... Recently, however, thinking has begun to shift toward distribution-free (nonparametric) tests that have less restrictive assumptions than their classical counterparts and are therefore less sensitive to the distribution of the water-quality time series." Although nonparametric tests also have problems with serially correlated data, the nonparametric tests used in this report have the advantage that the form of the distribution need not be known or assumed.

Typically, suspended-sediment concentrations are related to rates of streamflow. The effect of this relation on trend detection is, as explained by Crawford and others (1983, p. 10-11, paraphrased): sediment concentrations and streamflow are related, apparent trends in sediment may be due only to fluctuation in streamflow rather than to changes in the processes that affect the introduction and fate of sediment in the stream. For example, consider a typical stream where sediment concentrations increase as streamflow increases and vice versa. wet weather, large suspended-sediment concentrations would be expected. If this wet weather was followed by a drought, a decrease in suspendedsediment concentrations would be expected. If such a time series was tested for trends in sediment concentrations, a significant downtrend would be indicated. However, such a trend could be entirely attributable to the fluctuation in streamflow during the period. In order to test for trends in the processes affecting sediment during the period, it would be necessary to remove the effect of streamflow. Flow adjustment is an attempt to remove a major source of variation in sediment concentrations that may be masking those variations attributable to changes in the sediment contributions to the stream or in the processes occurring in the stream.

The method of flow adjustment used in this investigation was simply to fit a regression equation to the relation between sediment concentrations and streamflow rate, then calculate the flow-adjusted concentration as the actual concentration minus the concentration predicted from the regression equation. Several regression models were tested for fit of the data without regard to time for each sediment station. These included linear,

log-linear, quadratic, log-quadratic-log, log-log, and hyberbolic models. Mathematical forms of these models are given in Crawford and others (1983). The applicability of each model was judged by the coefficient of determination (\mathbb{R}^2) and graphs of predicted and measured values versus streamflow rate. When the model was linear, log-linear, quadratic, or hyperbolic, the flow-adjusted concentrations were in units of concentration (milligrams per liter). When the model was log-quadratic-log or log-log, the flow-adjusted concentrations were in units of natural logarithms of concentration. The regression equations used in the calculation of flow-adjusted concentrations are not shown in this report because their use for any other purpose would probably give erroneous results if time trends exist or if applied to data outside the range for which they were developed.

It is well known that unadjusted sediment concentrations and flow-adjusted concentrations vary seasonally in Kansas. For example, unadjusted and flow-adjusted concentrations generally are small in winter, when streamflows result from snowmelt or slight-intensity rainfall on frozen soil, compared with summer, when streamflows commonly result from intense rainfall on tilled soil. The statistical tests for trend used in this report avoided the problem of seasonality by comparing only data from the same season of the year. January data were compared only with January data, April data only with April data, and so on.

The test used for monotonic time trends (one-directional and without discontinuity) is a modified form of Kendall's tau (Kendall, 1975) derived by Hirsch and others (1982). For data-collection stations having the possibility of a sudden change in flow-adjusted concentrations because of the closure of a large reservoir upstream, a test for differences between two separate periods in a time series was used. This test uses a modified version of the Wilcoxon rank-sum test, which is equivalent to the Mann-Whitney test described in Conover (1971, p. 224). The seasonal rank-sum test compares only data from the same season, as does the seasonal Kendall test.

The tests used are tests of the "null hypothesis" that there was no monotonic trend (for the seasonal Kendall test) or that there was no change between two periods (for the seasonal rank-sum test). One value computed for each test is the probability of falsely rejecting the null hypothesis. The slope estimator in the seasonal Kendall test is the median of the slopes of all possible same-season pairs of data. In tests for trend, as in other statistical tests, even if the probability of falsely rejecting for an individual station is small, when the test is made for each of a group of stations the probability of falsely rejecting the hypothesis for at least one station of the group is fairly substantial. This needs to be kept in mind when evaluating the results of tests for a group of stations.

Another possibility of error is of accepting the null hypothesis when it is actually false; that is, concluding there was no trend when a trend actually existed. The screening of data-collection stations before trend tests were made may have eliminated many stations where this error would have been made, as well as eliminating other stations where the

other error, of erroneously concluding that a trend existed, would have been made. If a significant trend is not indicated by the test for a particular station, no conclusion can be made for that station. The absence of indication of trend may have been caused by actual absence of trend or by the small number or substantial variance of the data available for the test.

In this investigation the interpretation has been made that, for the purpose of design of a data-collection program, if trends are detected for several stations, the assumption is that trends may have existed or may occur in the near future at other stations, and the data-collection program can be adjusted to accommodate them.

Sediment data used for the trend analyses were from the U.S. Geological Survey's Water-Quality Data File, which includes all types of water-quality data except for daily values. For most sediment stations having daily records, concentration data other than daily values are available, usually in the form of concentrations determined from samples collected for particle-size analysis. For some stations, the use of daily values for trend analysis would be worthwhile because it would increase the quantity of data used. However, daily values are strongly serially correlated, which decreases the value of the additional data. Because of the serial correlation and because the computation system used in this investigation provides for the most convenient use of a single-file system as input to the trend tests, the daily values were not used.

In addition to the daily values, some of the other available data were not used in the trend analyses. For many of the samples, the streamflow rate at the time of sampling had not been determined, and those samples were not used in the analyses. Sediment-concentration values with peculiarities, such as concentrations for composites of samples collected on different days, were not used. For these reasons, the quantity of data used in the trend tests for many of the stations was less than the quantity of data listed in the inventory table (table 5).

Results of Analysis

Results of the tests for monotonic trends are shown in table 1. The seasonal Kendall test for monotonic trend was used for stations at which there was no sudden large change (a large reservoir) that would overshadow any gradual trend. Results for stations at which sediment concentrations would be affected by more than one reservoir in different years also are included in table 1. Some of these stations also are included in table 2, which contains the results of Wilcoxon rank-sum tests for step trend where a large reservoir would be expected to have a sudden large effect. The Wilcoxon rank-sum test was used for some stations where a particular one of two or more reservoirs was thought to have the most effect.

Of the 38 data-collection stations in table 1 that were not affected by large reservoirs, trends were detected at the 5-percent (0.05) level of probability at 11 stations, or 29 percent of the stations. Because of the limitations of the data and the analysis, the probability that trends

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations

Data collec- tion	Water years	Number of measure-	·	12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	Slope	Probability level	
06815300	1963-71, 1976-79	06	1/-0.025	0.90	Watershed-district flood-detention struc- tures 1963-68, 47 percent of drainage area.
06846500	1962-63, 1973-75, 1977, 1979, 1981, 1983	47	2/-97.	3/.00	No watershed district.
00826600	1960-61, 1976, 1978-83	444	17.035	•36	Harlan County and Lovewell Reservoirs completed before 1960. Watershed-district flood-detention structures 1983, 0.2 percent of drainage. Upstream from Milford Lake.
06867000	1951, 1958, 1960, 1976-77, 1979-83	80	1/015	4/	Upstream from Wilson Lake. No watershed dis- trict. Data biased; only small flow rates sampled in late years.
06869500	1960, 1972 - 83	84	1/.058	.71	Downstream from Wilson Lake. Watershed- district flood-detention structures 1971-80, 4 percent of drainage area.
00692990	1960-62, 1973-83	141	1/008	.57	Downstream from Waconda Lake. Watershed- district flood-detention structures, 5 percent of drainage area.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data collec- tion	Water years	Number of measure-	12-season on flo	12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	S1 ope	Probability level	
06877600	1960-61, 1973-83	119	1/ -0.022	0.19	Downstream from several reservoirs. Watershed- district flood-detention structures 1971-83, 4 percent of drainage area.
06884400	1976-83	55	1/017	68.	Upstream from Tuttle Creek Lake. Thirteen watershed-district flood-detention structures in Nebraska 1979, very small fraction of drain- age area.
06887000	1975-83	80	2/-2.6	3/.02	Directly downstream from Tuttle Creek Lake. Measurements all made after completion of lake.
06887500	1960-61, 1973-83	105	1/052	00.	Downstream from reservoirs. Watershed- district flood-detention structures 1971-83, 4 percent of drainage area.
06889100	1973-80	44	1/.194	• 59	No watershed district.
06889120	1973-80	. 85	1/ .060	99*	No watershed district.
06889140	1973-80	39	1/.014	1.00	No watershed district.
06889160	1973-80	29	1/ .104	•36	No watershed district.
06889180	1973-75, 1977-80	44	1/.010	1.00	No watershed district.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data collec- tion	Water years	Number of measure-	12-seasc on fl	12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	Slope	Probability level	
06889200	1973-75, 1978-80	35	1/0.034	0.84	No watershed district.
06892000	1960-61, 1976-83	62	1/006	• 95	No watershed district.
07137500	1958, 1962, 1975-83	104	1/130	3/.01	Downstream from John Martin Reservoir, measurements all made after completion of reservoir. No watershed district.
07138000	1958, 1961, 1973-81, 1983	132	1/.021	• 26	Downstream from John Martin Reservoir, measurements all made after completion of reservoir. No watershed district.
07139500	1958, 1961, 1973-81	61	2/93.	3/.00	Downstream from John Martin Reservoir, measure- ments all made after completion of reservoir. Watershed-district flood-detention structures 1968-69, 0.2 percent of drainage area.
07140000	1958, 1960 - 62, 1975-83	71	<u>1/</u> .026	•30	Downstream from John Martin Reservoir, measure-ments all made after completion of reservoir. Watershed-district flood-detention structures 1968-69, 0.1 percent of drainage area.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data collec- tion	Water years	Number of measure-	12-seasor on flo	12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	Slope	Probability level	
07141200	1958-60, 1962, 1973-83	46	1/-0.005	0.73	Sixteen watershed-district flood-detention structures completed by 1975, 5 percent of drainage area.
07141300	1957-61, 1973-76, 1981	73	2/3.5	.32	Downstream from John Martin Reservoir, measure- ments all made after completion of reservoir. Watershed-district flood-detention structures 1968-69, 0.8 percent of drainage area.
07143300	1939-52, 1958, 1960-63, 1965-66, 1971, 1973-83	237	1/016	37.00	Cheyenne Bottoms wetland enlarged about 1955. No watershed district.
07143330	1959-62, 1973-83	120	1/004	. 83	Downstream from John Martin Reservoir, measure- ments all made after completion of reservoir. Watershed-district flood-detention structures, 0.8 percent of drainage area.
07144200	1944-52, 1957-63, 1965-74, 1977-83	188	1/.006	38	Watershed-district flood-detention structures 1982, 0.4 percent of drainage area.
07144780	1973-83	136	27.7	• 68	Upstream from Cheney Reservoir. No watershed district.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data collec- tion	Water years	Number of measure-	·	12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	Slope	Probability level	
07145200	1962, 1973-83	11	2/-1.1	0.58	No watershed district.
07145500	1940-52, 1954, 1958, 1960-62, 1973-83	204	1/203	00.	Downstream from Cheney Reservoir. Watershed- district flood-detention structures 1962, 1972, 0.6 percent of drainage area.
07146500	1943-45, 1958, 1961-62, 1973-83	192	1/027	3/.00	Watershed-district flood-detention structures 1962-83, 0.7 percent of drainage area.
07147070	1961-62, 1976-83	71	<u>1</u> /038	•04	Probably biased; only high flows sampled in 1961-62. Watershed-district flood-detention structures 1976-81, 15 percent of drainage area.
07147800	1943-45, 1961-62, 1973-74, 1976-77,	125	1/027	00.	Downstream from El Dorado Lake. Watershed- district flood-detention structures 1965-82, 28 percent of drainage area.
07149000	1938-50, 1958, 1962, 1976-81	256	2/-15.	4/	No watershed district. Data biased; only small flow rates sampled in late years.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data collec- tion	Water years	Number of measure-		12-season Kendall test on flow-adjusted concentration	Remarks
station		ments	Slope	Probability level	
07157500	1944-48, 1973, 1975-83	82	2/-0.7	69*0	No watershed district.
07157900	1973-81, 1983	46	1/097	/4	No watershed district. Data biased; only small flow rates sampled in late years.
07165700	1956-77	544	1/-,009	•19	Downstream from Toronto Lake. Watershed- district flood-detention structures 1962-70, 66 percent of drainage area.
07166000	1940-52, 1954-78	423	2/-26.	00.	Downstream from Toronto Lake. Watershed- district flood-detention structures all up- stream from Toronto Lake, all completed after lake.
07166500	1940-78	451	1/035	00.	Downstream from Toronto Lake. Watershed-dis- trict flood-detention structures all upstream from Toronto Lake, all completed after lake.
07167000	1947-48, 1950-51, 1954-76	185	1/036	3/.00	Upstream from Fall River Lake. Watershed-dis- trict flood-detention structures 1965-71, 50 percent of the drainage area.
07168500	1940-49, 1951-52, 1955, 1957-78	245	2/-10.	00.	Downstream from Fall River Lake. Watershed-district flood-detection structures all upstream from lake, all completed after lake.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

Data	Water	Number	12-season Kendall test	endall test	Remarks
collec- tion	years	ot measure-	on flow-adjusted concentration	adjusted	
station		ille n cs	Slope	Probability level	
07169800	1967-78, 1980	104	1/-0.048	3/0.04	Upstream from Elk City Lake. Watershed- district flood-detention structures 1973-79, 52 percent of drainage area.
07170000	1940-44, 1948, 1954-70	170	1/-,016	.13	Upstream from Elk City Lake. All measurements made before any watershed-district flood-de- tention structures completed.
07170700	1958-78, 1980	502	1/-,002	.81	Site of Big Hill Lake. Measurements all made before lake. No watershed district.
07172000	1940-53, 1955-78	224	1/041	3/.00	Watershed-district flood-detention structures 1965-82, 40 percent of drainage area.
07179500	1940-47, 1950, 1955-56, 1958-64, 1969-72, 1978-79, 1982	157	2/14.	00•	Downstream from Council Grove Lake. No water-shed district.
07179730	1966-78	119	17.0	1.00	Downstream from Council Grove Lake, all measure- ments made after lake completed. No watershed district.
07180000 and 07179795	1940-42, 1944-48, 1951-52, 1951-52, 1957-63, 1965-67, 1971-76, 1979,	164 .52, .67,	2/-9.5	00•	Downstream from Marion Lake. Biased by change of site. No watershed district.

Table 1.--Results of tests for monotonic time trends in suspended-sediment concentrations--Continued

dall test justed tion	Probability level	00 No watershed district.	.09 Downstream from Marion Lake. Watershed- district flood-detention structures 1965, 0.7 percent of drainage area.	.44 Downstream from John Redmond Reservoir, all measurements made before completion of reservoir. No watershed district during time of measurement.	Downstream from John Redmond Reservoir. Watershed-district flood-detention structures 1976, 1979, 0.7 percent of drainage area. Data biased; only large flow rates sampled in early years.	<pre>00 No watershed district. Probably affected by strip-mine ponds.</pre>
12-season Kendall test on flow-adjusted concentration	Slope Prol	1/-0.028 3/0.00	1/020	1/25	2/-1.1 4/	1/.035 3/.00
Number of measure-	ments	217	180	51	85	109
Water years		1940-48, 1951-52, 1957-79, 1982	1963-79, 1982	1940, 1944-49, 1951-52, 1961	1958, 1961, 1976-83	1940-46, 1976-83
Data collec- tion	station	07180500	07182250	07183000	07183500	07184000

Units are natural logarithms of milligrams per liter per year. Units are milligrams per liter per year. Statistically significant (0.05 level) and not affected by closure of large reservoirs during period

analyzed. Probability level unknown because of bias in data analyzed.

Table 2.--Results of seasonal nonparametric tests for step changes in flow-adjusted concentrations

Station	Water	Şe	Seasonal step	step test, 12	seasons		Reservoir having
	years of data used	Cutoff date	Number of measure-	Number of measure-	Flow-adjusted concentration	usted ation	most effect
		(decimal time)	ments before reservoir comple- tion	ments after reservoir comple- tion	Step Prob	Probability level	
00869200	1960 , 1972-83	1964.99	6	75	1/-1.227	0.02	Wilson Lake
0069/890	1960-62 , 1973-83	1969.02	58	83	$\frac{1}{4}$ 315	.16	Waconda Lake
06887500	1960-61 , 1973-83	1967.04	41	64	1/-1.159	00.	Milford Lake
07145500	1940-52, 1954, 1958, 1960-62, 1973-83	1964.88	121	83	17738	00.	Cheney Reservoir
07147800	1943-45, 1961-62, 1973-74, 1976-83	1981.50	108	17	1/547	00•	El Dorado Lake
07166000	1940-52, 1954-78	1960.21	125	298	2/-816.	00.	Toronto Lake
07166500	1940-78	1960.21	209	242	1/752	00•	Toronto Lake

Table 2.--Results of seasonal nonparametric tests for step changes in flow-adjusted concentrations--Continued

Station	Water	Sea	Seasonal step	step test, 12	seasons		Reservoir having
	years of data used	Cutoff date	i e	Number of measure-	됴	ow-adjusted concentration	most effect -
		(decimal time)	ments before reservoir comple- tion	ments after reservoir comple- tion	Step	Probability level	
07168500	1940-48, 1950-51, 1954-76	1949.30	68	156	2/-638.	00.00	Fall River Lake
07179500	1940-47, 1950, 1955-56, 1958-64, 1969-72, 1978-79, 1982	1964,78	63	64	<u>2</u> / -444.	000.	Council Grove Lake
07180000 and 07179795	1940-48, 1951-52, 1957-63, 1965-67, 1971-76, 1979,	1968,16	141	23	<u>2</u> /-412.	00.	Marion Lake. Probably biased by change of site.
07182250	1963 - 79 , 1982	1968.16	74	106	1/138	* 08	Marion Lake.
07183500	1958, 1961, 1976-83	1963.69	4	78	2/-228.	37	Biased: only high-flow measurements before 1963. John Redmond Reservoir

1 Units are natural logarithms of milligrams per liter. 2 Units are milligrams per liter. 3 Probability level unknown because of bias in data analyzed.

¹⁸

existed at other stations but were not detected cannot be determined. Ten of the trends were negative, or toward smaller concentrations in later years, and 1 of the trends was positive. The single positive trend was at station 07139500, Arkansas River at Dodge City. The scope of this study did not allow for investigation of this unusual trend at this site, which is downstream from station 07137500, Arkansas River at Coolidge, where a negative trend was detected.

Of the apparent trends that were individually not significant at the 5-percent probability level, the slopes were negative for many more stations than were positive. This result is another indication of wide-spread negative trends and indicates a likelihood that many stations, including some not in table 1 because of insufficient data, had trends toward smaller concentrations. However, the slopes of the trends were not steep enough or the available data not complete enough to show them with statistical significance.

Six of the 11 detected trends were in and adjacent to the Walnut River basin, southeast of Wichita. This cluster of detected trends may exist only because of a geographic cluster of stations having a relatively large quantity of data available.

Nine of the stations analyzed for time trend were upstream from large reservoirs, and trends toward smaller concentrations were detected at only two of them (07167000, upstream from Fall River Lake, and 07169800, upstream from Elk City Lake). From this relatively limited evidence it may be concluded that additional measures, such as erosion-control treatment and upstream reservoirs, would be needed if the rate of sediment accumulation in large reservoirs is to be significantly decreased.

The seasonal step test for sudden changes was applied for stations downstream from large reservoirs. In 9 of the 12 cases (table 2) the test showed a significant (0.05 level) step trend to smaller concentrations, as expected. Records that did not show significant step trends were station 06876900, for which 25 percent of the drainage area is downstream from Waconda Lake and produces 75 percent of the streamflow; station 07182250, for which 90 percent of the drainage area is downstream from Marion Lake; and station 07183500, for which the available data were biased.

Factors Affecting Time Trends

Detailed study of factors affecting time trends is beyond the scope of this report because knowledge of the causes of trends is not necessary for the design of a data-collection program. Knowledge that time trends exist is sufficient for the major decisions in designing a program. In addition, for most of the drainage areas of the sediment data-collection stations in this report, detailed data on changes in land-use and farming practices would be extremely difficult to compile. The effect of water-shed-district activities, however, can be studied in a limited way with data readily available.

In watershed districts, structures and erosion-control practices are intended to decrease the quantity of sediment moving downstream, among other benefits. In this report the watershed-district activity upstream from each sediment station was measured by the span of years during which flood-detention structures were completed and by the percentage of the drainage area from which floodwater was detained and sediment was trapped (table 1). For a few of the stations, the information was incomplete, but enough information was available to judge whether the watershed-district activity was extensive enough to measurably affect the sediment concentrations at the sediment-data station. Because of the large variability of sediment concentrations, less than 10 percent of the area was judged to be too little to have a measurable effect.

Of the 6 data-collection stations with more than 10 percent of the area affected by watershed-district flood-detention structures, 4 stations or 67 percent had statistically significant trends toward smaller sediment concentrations, and none had trends toward larger concentrations, sig-In contrast, of the 32 stations with less than 10 nificant or not. percent of the area affected by watershed-district structures, only 4 or 12 percent had statistically significant trends toward smaller sediment concentrations. Although not statistically testable, the conclusion appears to be that the sediment-data program has shown that watershed districts have a definite effect of decreasing the sediment concentrations at locations downstream. The conclusion appears justified despite some apparent anomalies in the results. For example, the trend was not statistically significant at station 07165700, Verdigris River near Madison, despite 66 percent of the drainage area being affected by watershed-district flood-detention structures. Nearby, station 07180500, Cedar Creek near Cedar Point, showed a significant trend to smaller sediment concentrations despite having no watershed-district activity. The results for two stations on Elk River strengthen the conclusion, however. station 07176000, Elk River near Elk City, the sediment data were collected before the beginning of watershed-district activity upstream, and the trend was not significant. For station 07169800, Elk River at Elk Falls, sediment data were collected before, during, and after watersheddistrict construction, and the trend to smaller sediment concentrations was statistically significant.

Effect of Time Trends on Use of Sediment-Data Records and Design

of Sediment Data-Collection Program

For many of the sediment stations, various users have made computations of such information as long-term average sediment yields and concentration-duration curves. Future needs for planning or design of water projects may include similar sediment information. Because time trends have been detected at numerous stations and trends cannot be ruled out where not detected at the 5-percent level of probability, computations based on data more than a few years old may be misleading at any site. Where accurate sediment information applicable to current conditions is needed at a specific site, collection of additional data for about 2 years needs to be considered.

SEDIMENT-DATA PROGRAM, 1984

The 1984 sediment-data program of the Kansas Water Office in cooperation with the U.S. Geological Survey was designed to supplement the specific-purpose programs of other agencies by providing more general-purpose data. The 1984 set of stations has been in operation for about 7 years and consists of 42 stations at which suspended-sediment samples are collected about 9 times per year--more times if high flow is frequent during a year, and fewer times if periods of no flow are prevalent during a year. The sediment stations are at streamflow-gaging stations, and the streamflow rate is determined for the time of sediment sampling. A particle-size analysis is performed in conjunction with the concentration analysis, except when the quantity of sediment in the samples is insufficient for a valid analysis. Normally, bed-material samples are collected and analyzed for particle size two times a year.

The adequacy of the 1984 program was judged by the suspended-sediment concentration and particle size but not by data on bed material. Bed-material particle size does not change as rapidly as suspended-sediment concentration does or as suspended-sediment particle size sometimes does; thus, adequacy of bed-material data is easily achieved. Therefore, the assumption can be made that bed-material data will be adequate whenever suspended-sediment data are adequate.

The adequacy of sediment-concentration data at an individual station was judged by the adequacy of the data to determine the relation between sediment concentration and streamflow rate for the purpose of estimating the suspended-sediment discharge or concentration-duration curve during a period of available streamflow record (a long-term average). Adequacy of both concentration and particle-size data, therefore, was judged by the density of coverage by samples of the full range of streamflow rates, except for low flow which has negligible effect. Consideration of time trend was not ignored, but time trend was assumed to be present at every station. Therefore, first the adequacy of data to represent conditions during the period of record was judged, then the effect of the assumed time trend on the need for change in the data program was included.

Density of sediment-sample coverage was judged from diagrams of streamflow percentage distributions on which the sampled streamflows were noted. An example in which the range of streamflows, except for low flow, is covered for both concentration and particle-size samples is shown in figure 1. Coverage for particle size does not need to be dense and is adequate in this example. However, coverage for suspended-sediment concentration is not dense enough for good estimation of the relation between concentration and streamflow. The inability of the data to define the relation is shown in figure 2.

An example of very dense sample coverage for both suspended-sediment concentration and particle size is illustrated in figure 3. Although concentrations are scattered with respect to streamflow rate in figure 4, the average relation is reasonably well defined. However, nearly all the suspended-sediment samples taken during high flow are from 1949-51, and

the preponderance of low-flow samples are from 1979-82. New samples of suspended sediment during high flow are needed. In another example (fig. 5), it is obvious that a substantial range of high flows has not been covered by sediment samples. In addition, the graph shows very little sample coverage for particle size. Data collection needs to be continued at this station until concentration coverage has been achieved for high flows, and particle-size coverage has been achieved for all flows.

The results of the analysis for stations in the 1984 cooperative program of the Kansas Water Office and the U.S. Geological Survey are summarized in table 3 at the end of this report. In this table, the period of record is considered to include any year in which at least one sample was obtained. At some stations in the data-collection program, the stream was flowing so infrequently that no samples were obtained in some years.

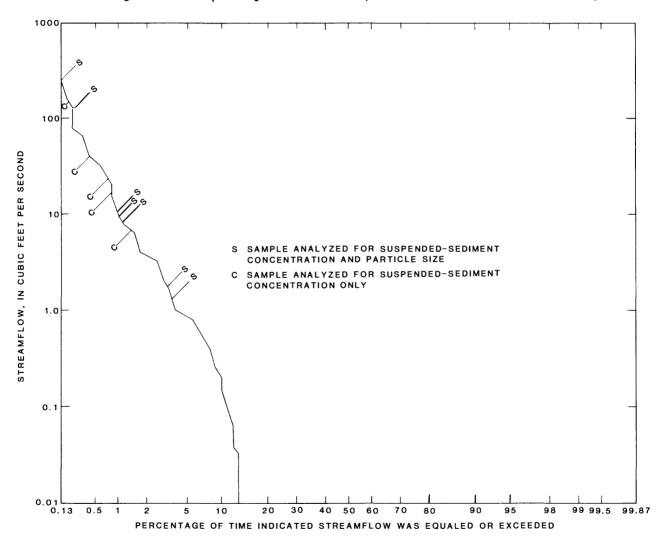


Figure 1.--Density of sample coverage in relation to streamflow percentage distribution, station 07139800, Mulberry Creek near Dodge City.

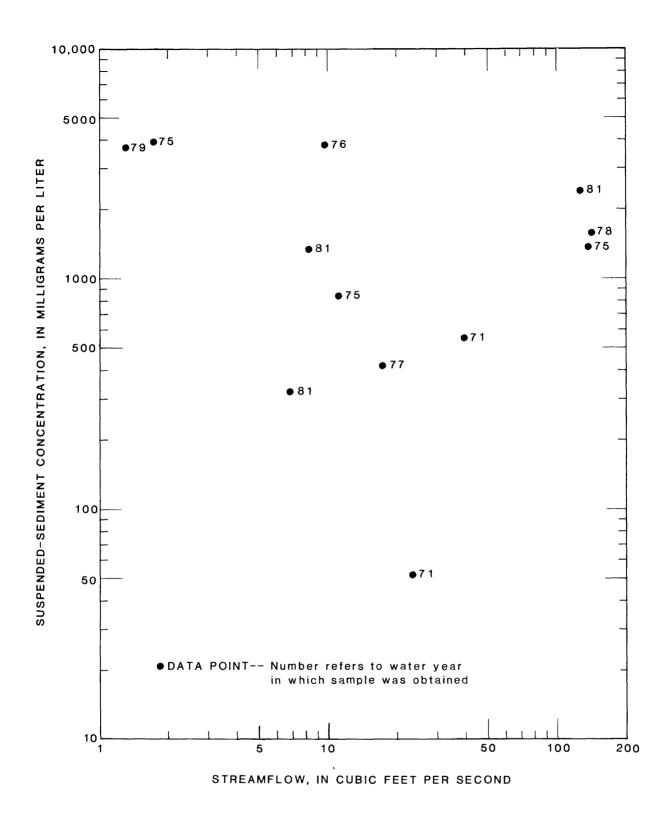


Figure 2.--Relation between suspended-sediment concentration and streamflow for station 07139800, Mulberry Creek near Dodge City.

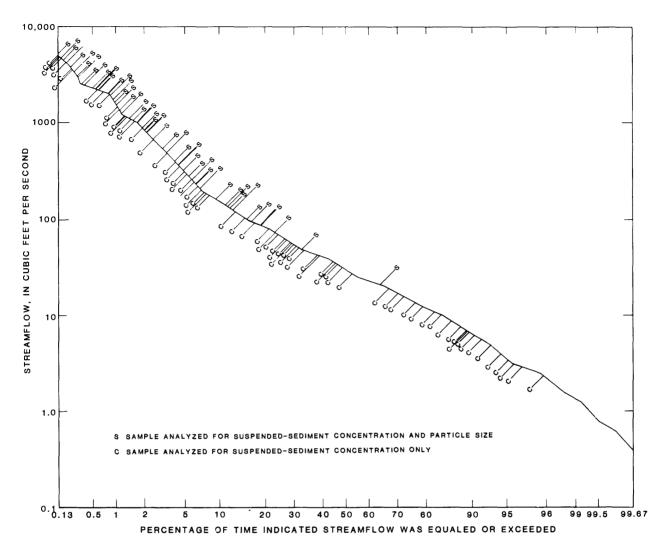


Figure 3.--Density of sample coverage in relation to streamflow percentage distribution, station 06867000, Saline River near Russell.

ADJUSTMENT OF DATA-COLLECTION PROGRAM

Adjustments in the sediment data-collection program can be made under the assumption that time trends may exist at any station. Because the seasonal tests for time trend do not require data for every month of every year, some 1984 stations can be discontinued for several years and later resumed, and some previously discontinued stations can be reactivated without detriment to future detection of time trends. Consideration also is given to the previous judgments of the adequacy of data at existing stations. An additional consideration is the need for data on sediment inflow to large flood-control and water-supply reservoirs.

Discontinuance of Stations

Twelve sediment stations have adequate data for present (1984) needs and can be discontinued until 1992 (table 3). At these stations the sample coverage is adequate for suspended-sediment concentration and particle

size until some later date when time trends may change the applicability of the data. These 12 stations can be discontinued at the end of water year 1985 after adequate consultation with other agencies to give consideration to possible special needs for continuing data collection. The candidates for discontinuance until 1992 are:

```
06869500
          Saline River at Tescott:
06877600 Smoky Hill River at Enterprise;
06887500
         Kansas River at Wamego:
06892000
          Stranger Creek near Tonganoxie;
07138000 Arkansas River at Syracuse;
07140000
         Arkansas River near Kinsley:
07141200
          Pawnee River near Larned:
07141900
          Walnut Creek at Albert;
07143330
          Arkansas River near Hutchinson;
07145500
          Ninnescah River near Peck:
07146500
          Arkansas River at Arkansas City; and
07147800
          Walnut River at Winfield.
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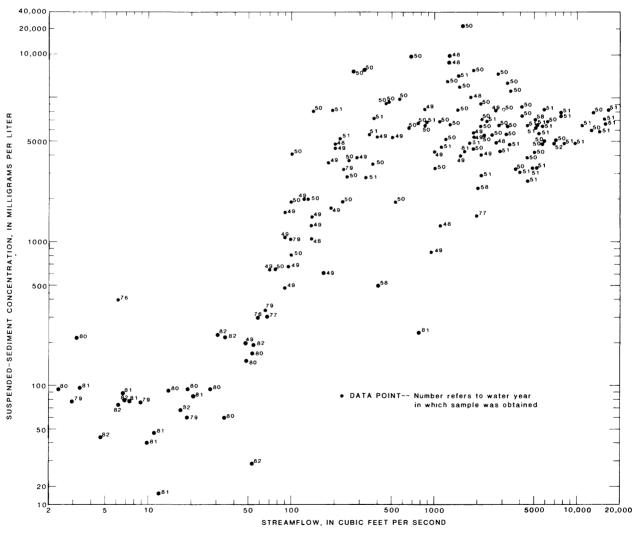


Figure 4.--Relation between suspended-sediment concentration and streamflow for station 06867000, Saline River near Russell.

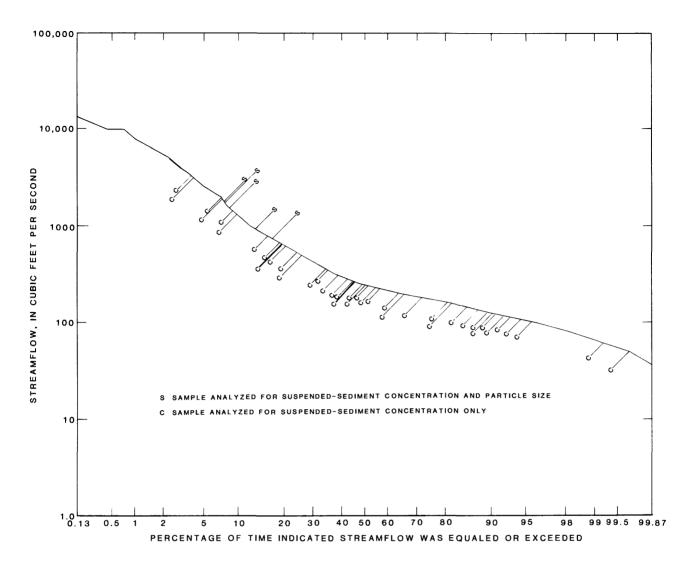


Figure 5.--Density of sample coverage in relation to streamflow percentage distribution, station 06884400. Little Blue River near Barnes.

New or Reactivated Stations

Resumption of periodic sampling is merited for eight previously discontinued stations. The new data can be used for detection of trends and computation of improved estimates of sediment yield, concentration-duration curves, and similar information. Some of the stations will provide new data on sediment inflows to large flood-control and water-supply reservoirs. The stations were selected without regard to which agencies had previously supported them. Stations that would provide the most valuable data after resumption of sampling are as follows:

06878000 Chapman Creek near Chapman (has sediment data for water years 1970-76);

06890100 Delaware River near Muscotah (upstream from Perry Lake, has sediment data for water years 1969-77);

- 07141300 Arkansas River at Great Bend (has sediment data for water years 1958-72);
- 07149000 Medicine Lodge River near Kiowa (has sediment data for water years 1961-69);
- 07151500 Chikaskia River near Corbin (upstream from proposed Corbin Reservoir, has sediment data for water years 1961-65);
- 07169800 Elk River at Elk Falls (upstream from Elk City Lake, has sediment data for water years 1964-72);
- 07179730 Neosho River near Americus (upstream from John Redmond Reservoir, has sediment data for water years 1964-72);
- 07182250 Cottonwood River near Plymouth (upstream from John Redmond Reservoir, has sediment data for water years 1963-72).

The group of stations resulting from 1984-program changes would be as shown in table 4 at the end of this report.

Operational Changes

Some of the effort no longer needed for certain sediment stations after their discontinuance could be used to obtain needed sediment data (usually during high flow) at the continued and reactivated stations. Extra data-collection trips may be needed for some stations. At other stations sampling equipment could be installed, and resident observers contracted and instructed in sampling techniques in order to obtain samples during specified ranges of flow. At a few stations it may be necessary to install automatic sampling equipment. Economy may be effected by acquiring one or two automatic pumping samplers and rotating them to different sediment stations each year. Needs for such operational changes will not be detailed in this report.

SUMMARY

Time trends can significantly affect the design of a sediment data-collection program. After adjusting suspended-sediment concentrations for their relation to streamflow rates and by using a seasonal adaptation of Kendall's nonparametric statistical test, time trends of flow-adjusted concentrations were detected for 11 of the 38 sediment records tested. Ten of the 11 trends were toward smaller concentrations; only 1 was toward larger concentrations. Of the apparent trends that were not statistically significant using the data available, nearly all were toward smaller concentrations. Because the reason for the lack of statistical significance of an apparent trend may be inadequacy of data rather than absence of trend and because of the prevalence of apparent trends in one direction, the assumption was made that a time trend may be present at any station. Sudden decreases (step trends) in flow-adjusted sediment concentrations were found at all stations that were short distances downstream from

large reservoirs and that had adequate data for a seasonal adaptation of Wilcoxon's nonparametric statistical test.

Examination of sediment records in the 1984 cooperative data-collection program with the Kansas Water Office indicate 12 stations where data are now adequate, and these stations can be discontinued until 1992 when new data may be needed because of possible time trends. New data are needed at eight previously operated stations where existing data may be inadequate or misleading because of time trends. Operational changes may be needed at some stations, such as hiring contract observers or installing automatic pumping samplers.

Results of this analysis, particularly the detection of time trends, show the importance of continuing the sediment data-collection program and periodically analyzing the results. Implementing the changes in the program could provide a substantial increase in the quantity of useful information on stream sediment for the same funding as the 1984 level.

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- 1982-83, Water resources data for Kansas, 1981-82: U.S. Geological Survey Water-Data Reports KS-81-1 and KS-82-1 (published annually).

U.S. Geological Survey Water-Supply Papers

Each water-supply paper contains data for the year listed and may contain some data for earlier years also.

Numbers of water-supply papers (WSP) containing sediment data inventoried in this report for Kansas and adjacent areas, 1907-09 and 1947:

Year	WSP	Year	WSP	Year	WSP	Year	WSP
1907	273	1908	273	1909	273	1947	1102

Numbers of water-supply papers (WSP) containing sediment data inventoried in this report for Kansas and adjacent areas in the Missouri River basin, 1948-70:

Year	WSP	Year	WSP	Year	WSP	Year	WSP
1948	1132	1954	1351	1960	1743	1966	1993
1949	1162	1955	1401	1961	1883	1967	2013
1950	1187	1956	1451	1962	1943	1968	2095
1951	1198	1957	1521	1963	1949	1969	2145
1952	1251	1958	1572	1964	1956	1970	2155
1953	1291	1959	1643	1965	1963		

SELECTED REFERENCES--Continued

Numbers of water-supply papers (WSP) containing sediment data inventoried in this report for Kansas and adjacent areas in the Lower Mississippi (Arkansas) River basin, 1957-70:

Year	WSP	<u>Year WSP</u>	Year WSP	Year	WSP
1958 1959	1522 1573 1644 1744	1961 1884 1962 1944 1963 1950 1964 1957	1965 1964 1966 1994 1967 2014 1968 2096	1969 1970	

Period of record examined (water vears)	Adequacy of suspended-sediment data Concentration Particle size	ded-sediment data Particle size	Comments
	06844700	South Fork Sappa Creek near Brewster	eek near Brewster
1968, 1971-72, 1975, 1979	Good (flow less than 2 percent of time)	600d (Continue station.
	06846500	O Beaver Creek at Cedar Bluffs	Cedar Bluffs
1962-65, 1968, 1970-75, 1977, 1979, 1981	poog	poog	Continue station, in order to obtain more information on trend.
	06847900 Prair	rie Dog Creek above	Prairie Dog Creek above Keith Sebelius Lake
1975-80	Inadequate	Poor	Continue station.
	06853800	O White Rock Creek near Burr Oak	near Burr Oak
1976, 1978-82	Inadequate, need more samples when streamflow ex- ceeds 100 cubic feet per second,	Inadequate	Continue station. Obtain samples when streamflow exceeds 100 cubic feet per second.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of record examined (water years)	Adequacy of suspended-some concentration Partices of Second North Fork some samples when streamflow exceeds 50 cubic feet per second.	suspended-sediment data Particle size North Fork Smoky Hill River near McAllaster when Streamflow e feet per second a ticle-size analys all flows. O6863500 Big Creek near Hays	Comments r near McAllaster Continue station. Obtain samples when streamflow exceeds 50 cubic feet per second and obtain par- ticle-size analyses representing all flows.
1979-82	Almost adequate but large scatter in concentration versus streamflow.	Inadequate Continue stat when streamfl feet per seco size analyses North Fork Big Creek near Victoria	Continue station, obtain more samples when streamflow exceeds 100 cubic feet per second and more particlesize analyses representing all flows.
1976, 1981-82	Inadequate 06867000	Inadequate Continue but diff during m	Continue station. More data needed, but difficult to get enough samples during medium and high flows.
1948-51, 1958, 1960, 1976-77, 1979-82	poo5	роод	Continue station, obtain samples during high flow to check time trend.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of	Adequacy of suspended-sediment data	d-sediment data	Comments
record examined (water years)	Concentration Par	Particle size	
	0686980	06869500 Saline River at Tescott	scott
1957-82	Adequate	Adequate	Discontinue, resume in 1992 for 2-3 years.
	06871000 Nor	06871000 North Fork Solomon River at Glade	r at Glade
1958, 1975, 1977, 1979-82	Inadequate	Inadequate	Continue station.
	06873000 South Fork	South Fork Solomon River above Webster Reservoir	Webster Reservoir
1958, 1976-77, 1979, 1981-82	Inadequate	Inadequate	Continue station.
	06877600 Smoky Hill	River	at Enterprise
1957-82	Adequate	Adequate	Discontinue, resume in 1992 for 2-3 years.
	06884400 L	Little Blue River near Barnes	ir Barnes
1976-82	Inadequate during high flows.	Inadequate	Continue station, obtain more samples during high flows.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of	Adequacy of suspended-sediment data	ded-sediment data	Comments
record examined (water years)	Concentration	Particle size	
	128890	06887500 Kansas River at Wamego	ате до
1957-82	Adequate	Adequate	Discontinue, resume in 1992 for 2-3 years.
	06892000	Stranger Creek near Tonganoxie	Tonganoxie
1957-61, 1976-82	роод	Adequate	Discontinue, resume in 1992 for 2-3 years.
	06911900	Dragoon Creek near Burlingame	Burlingame
1976-82	Nearly adequate, need more samples when streamflow exceeds 1,000 cubic feet per second.	Inadequate	Continue station. Obtain more samples when streamflow exceeds 1,000 cubic feet per second and more particle-size analyses representing all flows.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of record examined (water years)	Adequacy of suspen Concentration P	suspended-sediment data Particle size	Comments
	06914000	Pottawatomie Creek near Garnett	ar Garnett
1976-82	Nearly ade- quate, need more samples when streamflow exceeds 3,000 cubic feet per second	Inadequate	Continue station. Obtain more samples when streamflow exceeds 3,000 cubic feet per second; more particle-size analyzes during all flows.
	07138000	00 Arkansas River at Syracuse	Syracuse
1939-41, 1961, 1963-65, 1968, 1971-81	Adequate	Adequate	Discontinue, resume in 1992 for 2-3 years.
	07138650	White Woman Creek near Leoti	ar Leoti
1971, 1973-74, 1977-78	Adequate	Inadequate	Continue station, obtain more particlesize analyses.
	07139800	Mulberry Creek near	Dodge City
1971, 1975-81	Fairly good coverage but no relation of concentration to flow.	poog	Continue station to determine if more samples would show better relation of concentration to flow.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of	Adequacy of s	Adequacy of suspended-sediment data	Comments
record examined (water years)	Concentration	Particle size	
	0714	07140000 Arkansas River near Kinsley	. Kinsley
1958, 1960-65, 1968, 1972, 1974-81	poog	good	Discontinue, resume in 1992 for 2-3 years.
	07	07141200 Pawnee River near Larned	Larned
1958-60, 1962-65, 1967-68, 1971-81	poog	goog	Discontinue, resume in 1992 for 2-3 years.
	0	07141900 Walnut Creek at Albert	Albert
1958-65, 1971-72,	poog	Good	Discontinue, resume in 1992 for
79-0/61			2-3 years.
	07142300	O Rattlesnake Creek near Macksville	. Macksville
1975-82	Adequate	Inadequate	Continue station.
	01	07142860 Cow Creek near Claflin	laflin
1971, 1979-82	Inadequate	Inadequate	Continue station.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of record examined	Adequad	quacy of suspende entration Par	suspended-sediment data Particle size	Comments
(water years)				
		07143300	100 Cow Creek near Lyons	Lyons
1939-51, 1958 1960-66, 1968, 1971-82	poog	A	Adequate	Continue station to check on time trend.
		07143330 A	Arkansas River near Hutchinson	Hutchinson
1959-65, 1968, 1971-82	goog	9	роод	Discontinue, resume in 1992 for 2-3 years.
	-1	07143665 Little	Arkansas River	at Alta Mills
1960, 1976-82	p005	Δ.	Poor	Continue station until coverage is adequate for particle size, then determine if time trend exists.
	07144780	North Fork	Ninnescah River	above Cheney Reservoir
1968, 1971-82	p009	Ι	Inadequate	Continue station. One more year should be enough to make particle-size coverage adequate for full range of flows.
	-,	07144910 Sout	South Fork Ninnescah River	ver at Pratt
1981	Poor	Z	None	Continue station.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of record	Adequacy of susp	suspended-sediment data	Comments
examined (water years)	Concentration	Particle size	
	07145200	South Fork Ninnescah River near Murdock	near Murdock
1962-65, 1968, 1971-82	poog	Good, except no analyses represent- ing less than 200 cubic feet per second.	Continue station one more year to obtain particle-size samples representing less than 200 cubic feet per second. Then discontinue, to resume in 1992 for 2-3 years.
	<u> </u>	07145500 Ninnescah River near Peck	ar Peck
1940-52, 1954, 1958, 1960-65, 1968, 1971-82	роод	Good, except no analyses re- presenting less than 400 cubic feet per second.	Discontinue, resume in 1992 for 2-3 years.
	<u> </u>	07145700 Slate Creek at Well	Wellington
1976-77, 1979-82	Inadequate, gap in analyses from 70 to 4,000 cubic feet per second.	p Poor om bic d.	Continue station.
	0714	07146500 Arkansas River at Ark	Arkansas City
1943-45, 1958, 1961-66, 1968, 1971-82	900g	poog	Discontinue, resume in 1992 for 2-3 years.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of	Adequacy of suspend	suspended-sediment data	Comments
record examined (water years)	Concentration	Particle size	
	0714	07147070 Whitewater River	er at Towanda
1961-65, 1967-68, 1976-82	po 05	Good, except need more analyses re- presenting dis- charges between 5 and 100 cubic feet per second.	Continue 1 more year to obtain parti- cle-size analyses between 5 and 100 cubic feet per second, then discon- tinue. Resume in 1992 for 2-3 years.
	07	07147800 Walnut River at Winfield	at Winfield
1943-45, 1961-65, 1968, 1972-74, 1977, 1979-82	рооб	Good, except some analyses representing 100- 300 cubic feet per second would be desirable.	Discontinue, resume in 1992 for 2-3 years.
	07156010	North Fork Cimarron River	River at Richfield
1976-78	Inadequate	None	Continue station. Obtain particle- size analyses on all samples col- lected.
	07	07156220 Bear Creek near Johnson	ear Johnson
1971–72, 1977, 1979	Inadequate	None	Continue station. Obtain particle- size analyses.

Table 3.--Adequacy of sediment data at stations in cooperative program with Kansas Water Office, 1984--Continued

Period of	Adequacy of sus	Adequacy of suspended-sediment data	Comments
record examined (water years)	Concentration	Particle size	
		07157500 Crooked Creek near Nye	ek near Nye
1945, 1947-48, 1962-65, 1967-68, 1971, 1973,	рооб	Adequate	Continue station in order to determine if time trend is confirmed.
30 - 6761		07157900 Cavalry Creek at Coldwater	at Coldwater
1963, 1966-68 1971-81	рооб	Inadequate. Need some analyses representing discharges between 5 and 200 cubic feet per second.	Continue station until coverage of particle size is adequate.
		07183500 Neosho River near Parsons	near Parsons
1958, 1961-62, 1976-82	рооб	Poor	Continue station until coverage of particle size is adequate.
	·	07184000 Lightning Creek near McCune	k near McCune
1940-46, 1976-82	poo9	None	Continue station. Obtain particle- size analyses.

Table 4.--Stations proposed for sediment data-collection program in cooperation with Kansas Water Office beginning October 1985

Station number	Station name	Available data for water years through 1982	Remarks
06844700	South Fork Sappa Creek near Brewster	1968, 1970-72, 1975, 1979	Upstream from Keith
06846500	Beaver Creek at Cedar Bluffs	1958, 1962-75, 1977, 1979, 1981	
06847900	Prairie Dog Creek above Keith Sebelius	1970, 1976-81	
06853800	Lake White Rock Creek near Burr Oak	1966, 1976, 1978-82	Upstream from Lovewell
06858500	North Fork Smoky Hill River near McAllaster	1966, 1978-79, 1981	Keservolr
06863500	Big Creek near Hays	1958, 1966, 1976, 1979-82	Upstream from Wilson
06863900	North Fork Big Creek near Victoria	1976, 1981-82	
06867000	Saline River near Russell	1946-51, 1958, 1960, 1964,	
06871000	North Fork Solomon River at Glade	1966, 1976-77, 1979-82 1958, 1966, 1968, 1975,	Lake Upstream from Kirwin
06873000	South Fork Solomon River above Webster Reservoir	1977, 1980-82 1958, 1966, 1975-77, 1980-82	keservoir Upstream from Webster Reservoir
06878000	Chapman Creek near Chapman	1958-62, 1976-78	Upstream from Tuttle
06884400	Little Blue River near Barnes	1960-70, 1976-82	
06890100	Delaware River near Muscotah	1977-79	oreek Lake
06911900	Dragoon Creek near Burlingame	1962-69, 1976-82	Upstream from Perry Lake
06914000	Pottawatomie Creek near Garnett	1966, 1969, 1976-82	Upstream from Pomona Lake
07138650	White Woman Creek near Leoti	1966-67, 1971, 1973-74, 1977-78	
07139800	Mulberry Creek near Dodge City	1971, 1977-79, 1981	
07141300	Arkansas River at Great Bend	1907-08, 1944-46, 1949, 1957-76	
07142300	Rattlesnake Creek near Macksville	1977-82	
07142860	Cow Creek near Claflin	1966, 1971, 1979-82	

Table 4.--Stations proposed for sediment data-collection program in cooperation with Kansas Water Office beginning October 1985--Continued

number	Station name	Available data for water years through 1982	Remarks
07143300 07143665 07144780 07144910 07145200	Cow Creek near Lyons Little Arkansas River at Alta Mills North Fork Ninnescah River above Cheney Reservoir South Fork Ninnescah River near Murdock	1939-52, 1958, 1960-82 1960, 1976-82 1966-69, 1971-82 1981 1961-82	Upstream from Cheney Reservoir
07145700 07147070 07149000 07151500 07156010	Slate Creek at Wellington Whitewater River at Towanda Medicine Lodge River near Kiowa Chikaskia River near Corbin North Fork Cimarron River at Richfield	1977, 1979-82 1961-70, 1976-82 1907, 1938-50, 1958, 1961-63, 1965-66, 1968-69, 1976-81 1962-66, 1976	Upstream from proposed Corbin Reservoir
07156220 07157500 07157900 07169800	Bear Creek near Johnson Crooked Creek near Nye Cavalry Creek at Coldwater Elk River at Elk Falls Neosho River near Americus	1969, 1972, 1977 1944-45, 1947-48, 1961-73, 1975-82 1967-69, 1971-81 1967-78, 1980 1964, 1966-78, 1980	Upstream from Elk City Lake Upstream from John Red- mond Reservoir
07182250 07183500 07184000	Cottonwood River near Plymouth Neosho River near Parsons Lightning Creek near McCune	1963-80, 1982 1958, 1961, 1968, 1976-82 1940-46, 1966, 1969, 1976-82	Upstream from John Red- mond Reservoir

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983

Water year		Number of an	ialyses		Publication 1/ or office file 2/	Additional information
year		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office thes	
		key Creek ne nterpretive			as Col.1, Jor.2, Ost.2, Os	Drainage area = 276 square miles t.4, Ost.5
1949 1950 1951 1952 1953 1954 1966 1969	4/ 5/ do. do. 4/	59 20		2	SSMR 1949-54, USCE-KC, Udo. SSMR 1949-54, USCE-0 do. do. do. WSP 1993 WSP 2145 USGS-L	JSCE-0
00	6815270 Spr	ing Creek ne	ar Fairv	iew, Ka	nsas	
1968 1969 1970 1971	16 5 2 1	4	1		WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2	
00	6815274 Wal	nut Creek ne	ar Fairv	iew, Ka	nsas	Drainage area = 27.0 square miles
1976 1977 1978 1979	1 14 11 4	1 3 2 2			WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1	
00	6815280 Mul	berry Creek	near Fai	rview,	(ansas	
1968 1969 1970 1971	18 10 3 2	9	1		WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2	
00	6815288 Wal	nut Creek ne	ar Hamli	n, Kans	as	Drainage area = 57.0 square miles
1977 1978 1979	17 12 8	5 2 1			WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1	
0(6815290 Ter	rapin Creek	at Hamli	n, Kans	as	
1968 1969 1970 1971 1972	21 8 2 2 4	13	1		WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2	
0(6815300 Wal	nut Creek at	Reserve	, Kansa	s	Drainage area = 111 square miles
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1976 1977 1978 1979 1980	3 4 5 4 7 28 20 4 1 1 17 11 3	11 1 1 4 3 1	1 1		USGS-L do. do. do. do. WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nı	umber of an	alyses		Publication 1/ or office file 2/	Additional information
year	Suspended Concen- tration	sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
	815570 Wolf mmary or in				awatha, Kansas : Bev.1	Drainage area = 11.9 square miles
1978 1979 1980	29 18 21	5 3	1		WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
06 Su	815578 Wolf mmary or in	River at H terpretive	iawatha, publicati	Kansas ons <u>3</u> /:	Bev.1	Drainage area = 29 square miles
1977 1978 1979 1980	34 35 23 22	8 5 5	1		WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
	815700 Butte mmary or int					Drainage area = 3.74 square miles
1977 1978 1979 1980	40 22 19 20	6 1 4 1			WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
	815800 Wolf mmary or int				Bev.1	
1976 1977 1978 1979 1980	1 16 13 23 18	1 7 2 13			WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
	815880 Wolf mmary or int				Bev.1	Drainage area = 220 square miles
1976 1977 1978 1979 1980 1981	1 43 35 37 32 2	1 18 16 23 1	1		WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	
	818000 Misso mmary or int				issouri Ost.2, Ost.5	Drainage area = 424,300 square miles
1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1960 1961 1962 1963 1964 1965 1966 1967 1968	6/3 5/do.do.do.do.do.do.do.do.do.do.do.do.do.d				USCE-0 SSMR 1949-54, USCE-0 do. do. do. do. do. SSMR 1955-59 do. do. do. SSMR 1960-64 do. do. SSMR 1960-64 do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

		lumber of ar	nalyses		Publication <u>1/</u> or office file2/	Additional information
year	Suspended Concen- tration	1-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office fried	
	Missouri Rive	er at Leaver	worth, K	ansas		
1929	$\frac{6}{5}$, 3				HD-238	
1930 1931	₹/ 12 €/ 12				do. do.	
1932	<u>6</u> / ² 9				do.	
	06821500 Arii Summary or ii				aska ': Ost.5, Tas.1	Drainage area = 1,460 square miles
1947	<u>7/</u> 8/				WSP 1102	
1948 1949	<i>91</i> 13	3 13			WSP 1132 WSP 1162	
1950	25	25			WSP 1187	
1951 1977	8/	27		2	WSP 1198 USGS-L	
	06823000 Nort Summary or in	th Fork Repu	ıblican R publicat	iver nea	ır Benkelman, Nebraska : Ost.5	Drainage area ≈ 1,360 square miles
1977			1	2	WRD-NE, 1977; USGS-L	
1950 1962 1963 1964 1965 1966 1967	4/3/5/do. do. do. do. do.	nterpretive	publicat	ions 샆	SSMR 1960-64 do. do. SSMR 1965-69 do. do. WRD-NE, 1977	
	06827000 Sout	th Fork Repu	ublican R publicat	iver ne	ar Colorado-Kansas State Ost.3, Tas.1	line Drainage area ≈ 1,860 square miles
	Juninary or 11					
	6				WSP 1187	
1947	6 27				WSP 1187 do.	
1947 1948	6	16			WSP 1187	
1947 1948 1949	6 27 24				WSP 1187 do. do.	
1947 1948 1949	8/ 8/ 12	16 12	ublican R	iver at	WSP 1187 do. do. WSP 1162	
1947 1948 1949 1950	8/ 8/ 12	16 12	ublican R 1	iver at	WSP 1187 do. do. WSP 1162 WSP 1178	
1947 1948 1949 1950	8/ 27 24 12 06827200 Sour	16 12 Th Fork Repu	1 ublican R	iver ne	WSP 1187 do. do. WSP 1162 WSP 1178 St. Francis, Kansas	Drainage area = 2,740 square miles
1946 1947 1948 1949 1950	8/ 27 24 12 06827200 Sour	16 12 Th Fork Repu	1 ublican R	iver ne	WSP 1187 do. do. WSP 1162 WSP 1178 St. Francis, Kansas WSP 1993	Drainage area = 2,740 square miles
1947 1948 1949 1950 1966	6 27 24 3/ 12 06827200 Sour 3 3 06828500 Repi	16 12 th Fork Reputch Fork Reputch The Pork Reputch The P	1 ublican R publicat 1 er at Str	iver ne ions 3/	WSP 1187 do. do. WSP 1162 WSP 1178 St. Francis, Kansas WSP 1993 Pr Benkelman, Nebraska C Ost. 2, Ost. 5, Tas. 1 WSP 1187 WRD-NE, 1977	
1947 1948 1949 1950 1966 1950 1951	6 27 24 3/ 12 06827200 Sour 3 3 06828500 Reprosummary or in 7/	16 12 th Fork Reputch Fork Reputch Rep	publican R publicat 1 ar at Str publicat	iver ne ions 3/	WSP 1187 do. do. WSP 1162 WSP 1178 St. Francis, Kansas WSP 1993 Pr Benkelman, Nebraska COSt.2, OSt.5, Tas.1 WSP 1187 WRD-NE, 1977	
1947 1948 1949 1950 1966 1950 1977	8/ 27 24 12 06827200 Sour 06827500 Sour Summary or in 3	16 12 th Fork Repu th Fork Repu therpretive	1 ublican R publicat 1 er at Str	iver ne ions 3/	WSP 1187 do. do. WSP 1162 WSP 1178 St. Francis, Kansas WSP 1993 Pr Benkelman, Nebraska: Ost.2, Ost.5, Tas.1 WSP 1187 WRD-NE, 1977 Webraska: Ost.5, Tas.1	Drainage area = 2,740 square miles Drainage area = 8,450 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	·	Number of ar	alyses		Publication <u>1/</u> or office file <u>2/</u>	Additional information
year	Suspender Concen- tration	1-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
	06829500 Repu Summary or i	ublican Rive nterpretive	r at Tre publicat	nton, l ions3/	Nebraska : Tas.1	Drainage area = 8,620 square mile
1947	<u>7/</u> 8/	1			WSP 1132	
1948 1949	9∕ d o.	3 16			do. WSP 1162	
19 5 0	do.	37			WSP 1187	
19 5 1 1953	do. do.		2		WSP 1198 WSP 1291	
	06836460 Sout	h Fork Drif	twood Cr	eek nea	ır Ludell, Kansas	
1966			1		WSP 1993	
	06837000 Repu Summary or i	ublican Rive iterpretive	r at McC publicat	ook, Ne	pbraska : Ost.2	Drainage area = 12,310 square miles
1977			1		WRD-NE, 1977	
	Republican R	iver above M	ledicine	Creek a	it Cambridge, Nebraska	Drainage area = 13,200 square
1951	18	8			WSP 1198	miles
	068 4 3500 Repu	ıblican Rive	r at Cam	bridge,	, Nebraska	Drainage area = 14,520 square miles
1951	49				WSP 1198	miles
1952 1953	42 44	2			WSP 1251 WSP 1291	
1954	6	2			WSP 1351	
1962 1963	4/ 5/				SSMR 1960-64 do.	
1964	do.				do.	
1965	do.				SSMR 1965-69	
1966 1967	do. do.				do. do.	
1977			1		WRD-NE, 1977	
	06844500 Repu Summary or in	ublican Rive nterpretive	r near 0 publicat	rleans, ions 3/	Nebraska : Ost.5, Tas.1	Drainage area = 15,640 square miles
1948	8 <u>/</u> 5/	15			WSP 1132	
1949 1950	5/ do.				SSMR 1949-54	
1950	do.				do. do.	
1952	do.				do.	
1953 1954	do. do.				do. do.	
1955	do.				SSMR 1955-59	
1956	do.				do.	
1957 1958	do. do.				do. do.	
1959	do.				do.	
1960 1961	do. do.				SSMR 1960-64 do.	
1962	do.				do.	
1963	do.				do.	
1964 1965	do. do.				do. SSMR 1965-69	
1966	do.				do.	
1067	do.				do. do.	
1967						
1968 1969	do. do.				do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	·	Nu	mber o	of ana	lyses		Public or offi	ation1/ ce file2/	Additional information
yeui	Susp Conc trat		sedime Partio size	:Te	Bed- mater- ial size	Bank- - mater- ial size		00 11163	
	06844700	South	Fork	Sappa	Creek	near Br	ewster,	Kansas	Drainage area = 74.0 square miles
1968 1971 1972		2 9 1	1				WSP 2095 WRD-KS, WRD-KS	1971, part 2 1972, part 2	
1975 1979		3 2	2			2	WRD-KS,		S-L
	06844800	South	Fork	Sappa	Creek	Tributa	ry near	Goodland, Kansas	Drainage area = 4.98 square miles
1968		1	1				WRD-KS,	1968, part 2	
	06844900		Fork	Sappa	Creek	near Ac			Drainage area = 446 square miles
1974 1975		1					WRD-KS, WRD-KS,	1974, part 2 1975	
1979 1981		1 2				2		1979, vol. 1; USG	S-L
	06844950	Middl	e Fork	Sapp	a Creek	near C	olby, Ka	nsas	
1966			1				WSP 1993		
	06844970	North	Fork	Sappa	Creek	at Achi	lles, Ka	nsas	
1966			1				WSP 1993		
	Sappa Cro Summary	or int	Ober1			:ions <u>3</u> /			
	9/ 06845000	or int 4 Sappa	Ober1 erpret	near	ublicat	ions 3/	: Ost.4 WSP 273		Drainage area = 1,040 square miles
.907	9/ 06845000	4 Sappa or int	Ober1 erpret Creek erpret	near	ublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187	Ost.3, Ost.5, Ta	Drainage area = 1,040 square miles
.907 .950 .958 .963	9/ 06845000 Summary	or int 4 Sappa or int	Oberlerpret Creekerpret	near	ublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187 WSP 1949 do.	Ost.3, Ost.5, Ta	Drainage area = 1,040 square mile: s.1
.907 .950 .958 .963 .964	9/ 06845000 Summary	4 Sappa or int	Oberlerpret Creekerpret	near	ublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187 WSP 1949 do. WSP 1956	Ost.3, Ost.5, Ta	Drainage area = 1,040 square mile: s.1
.907 .950 .958 .963 .964 .965	9/ 06845000 Summary 8/ do.	Sappa or int 2 1 65	Ober1 erpret Creek erpret	near	ublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187 WSP 1949 do. WSP 1963 WSP 1963	Ost.3, Ost.5, Ta	Drainage area = 1,040 square mile: s.l
9907 950 958 963 964 965 966 967	9/ 06845000 Summary 8/ do.	Sappa or int	Ober1 erpret Creek erpret	near	Oberli Ublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187 WSP 1956 do. WSP 1963 WSP 1963 WSP 2013	Ost.3, Ost.5, Ta	Drainage area = 1,040 square mile: s.l
950 950 958 963 964 965 966 967 968 969	9/ 06845000 Summary 8/ 2/	Sappa or int 2 1 65 30 20	Ober1 erpret Creek erpret 1 8 8 5 3 4 11 7	near	Oberliublicat	n, Kans	: Ost.4 WSP 273 as : Ost.2, WSP 1187 MSP 1949 do. WSP 1956 WSP 1903 WSP 2013 WSP 2089 WSP 2145	Ost.3, Ost.5, Ta	Drainage area = 1,040 square mile: s.1
1.907 1.950 1.958 1.958 1.965 1.966 1.966 1.966 1.969 1.970	9/ 06845000 Summary 8/ do.	Sappa or int 2 1 65	Ober1 erpret Creek erpret	near	Oberli Ublicat	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1949 do. WSP 1956 WSP 1993 WSP 2013 WSP 2018 WSP 2155	Ost.3, Ost.5, Ta	Drainage area = 1,040 square miles
.950 .950 .958 .963 .965 .966 .966 .967 .968	9/ 06845000 Summary 8/ do. 8/ 7/	Sappa or int 2 1 65 30 20 37 13 eek ne	Ober1 erpret Creek erpret 1 8 8 5 3 4 11 7 3 2	c near tive po	Oberliublicat 1 1 2	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1187 WSP 1949 do. WSP 1956 WSP 1963 WSP 2013 WSP 2018 WSP 2018 WSP 2185 WSP 2185 WRD-KS,	Ost.3, Ost.5, Ta	S.1 Drainage area = 1,560 square mile:
.950 .950 .958 .963 .964 .965 .966 .969 .970 .971	9/ 06845000 Summary 8/ do. 8/ 7/	Sappa or int 2 1 65 30 20 37 13 eek ne	Ober1 erpret Creek erpret 1 8 8 5 3 4 11 7 3 2	c near tive po	Oberliublicat 1 1 2	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1949 do. WSP 1956 WSP 1958 WSP 2013 WSP 2015 WSP 2155 WRD-KS, : Col.1, WSP 1102 WSP 1132	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square mile:
.907 .950 .958 .964 .965 .966 .969 .970 .971	9/ 06845000 Summary 8/ do. 8/ Z/ Sappa Cr Summary 7/ 8/ do.	Sappa or int 2 1 65 30 20 37 13 eek ne	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 2 2 ar Beaerpret	c near tive po	Oberliublicat 1 1 2	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1966 WSP 1963 WSP 2093 WSP 2093 WSP 2095 WSP 2145 WSP 2155 WRD-KS, : Col.1, WSP 1102 WSP 1132 WSP 1162	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square mile:
.907 .950 .958 .963 .964 .965 .969 .971 .947 .948 .949 .949 .950	9/ 06845000 Summary 8/ do. 8/ Z/ Sappa Cr Summary	Sappa or int 2 1 65 30 20 37 13 eek ne	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 2 ar Beaerpret	c near tive po	Oberliublicat 1 1 2	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1949 do. WSP 1956 WSP 1958 WSP 2013 WSP 2015 WSP 2155 WRD-KS, : Col.1, WSP 1102 WSP 1132	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square mile:
.907 .950 .958 .963 .964 .966 .967 .971 .947 .947 .948 .949 .949 .949 .949 .949	9/ 06845000 Summary 8/ do. 8/ 7/ Sappa Cr Summary 7/ 8/ do. do.	Sappa or int 2 1 65 30 20 37 13 eek ne	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 ar Beaerpret	c near tive po	Oberliublicat 1 1 2	n, Kans 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1945 do. WSP 1993 WSP 2093 WSP 2093 WSP 2145 WSP 2155 WRD-KS, : Col.1, WSP 1102 WSP 1132 WSP 1132 WSP 1187	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square mile:
1907 1950 1958 1963 1964 1966 1966 1969 1970 1971	9/ 06845000 Summary 8/ do. 8/ 7/ Sappa Cr Summary 7/ 8/ do. do. do.	Sappa or int 2 1 65 30 20 37 13 eek ne or int	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 ar Beaerpret 17 46 38 41 20	c near tive po	Oberliublicat 1 1 2 ity, Neublicat	n, Kansaions 3/	: Ost.4 WSP 273 as : Ost.2, WSP 1987 do. WSP 1993 WSP 2013 WSP 2095 WSP 2145 WSP 2155 WRD-KS, : Col.1, WSP 1192 WSP 1132 WSP 1132 WSP 1132 WSP 1138 WSP 1251	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square mile:
1907 1950 1958 1963 1965 1966 1967 1968 1970 1971	9/ 06845000 Summary 8/ do. 8/ 7/ Sappa Cr Summary 7/ 8/ do. do. do. do.	Sappa or int 2 1 65 30 20 37 13 eek ne or int	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 ar Beaerpret 17 46 38 41 20	c near tive po	Oberliublicat 1 1 2 ity, Neublicat	n, Kansas	: Ost.4 WSP 273 as : Ost.2, WSP 1987 do. WSP 1993 WSP 2013 WSP 2013 WSP 2013 WSP 2014 WSP 2145 WSP 2145 WSP 1162 WSP 1162 WSP 1162 WSP 1162 WSP 1198 WSP 1251	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square miles
1966 1950 1958 1963 1964 1965 1966 1968 1969 1970 1971	9/ 06845000 Summary 8/ do. 8/ 7/ Sappa Cr Summary 7/ 8/ do. do. do. do.	Sappa or int 2 1 65 30 20 37 13 eek ne or int	Oberlerpret Creekerpret 1 8 8 5 3 4 11 7 3 2 ar Beaerpret 17 46 38 41 20	c near tive po	Oberliublicat 1 1 2 ity, Neublicat	n, Kansas	: Ost.4 WSP 273 as : Ost.2, WSP 1987 do. WSP 1993 WSP 2093 WSP 2093 WSP 2145 WSP 2145 WSP 2145 WSP 2145 WSP 2155 WRD-KS, : Col.1, WSP 1102 WSP 1132 WSP 1251	Ost.3, Ost.5, Ta 1971, part 2 Ost.2, Ost.3, Os	Drainage area = 1,560 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

	·	umber of ar	alyses		Publication 1/	Additional information
ye a r	Suspended Concen- tration	-sediment Particle size	Bed- mater- ial size	Bank- mater ial size	or office file <u>2</u> /	
	06846200 Beav	er Creek tr	ibutary	near L	udell, Kansas	Drainage area = 10.2 square miles
1981	2				WRD-KS, 1981	
					Kansas ': Col.1, Ost.2, Ost.3	Drainage area = 1,618 square mile , Ost.4, Ost.5, Tas.1
1962	<u>B</u> /	6			WSP 1943	
1963 1964	do. do.	14 8	2		WSP 1949 WSP 1956	
1965	do.	6	_		WSP 1963	
196 6	do.	2	1		WSP 1993	
1967	o / 33	2	1		WSP 2013	
1968	<u>8</u> /	8	3		WSP 2095	
1969 1970	do. 17	6 3			WSP 2145 WSP 2155	
1971	7	2			WRD-KS, 1971, part 2	
1972			1		WRD-KS, 1972, part 2	
1973	4				WRD-KS, 1973, part 2	
1974 1975	7 6	4			WRD-KS, 1974, part 2 WRD-KS, 1975	
1977	3	2			WRD-KS, 1977	
1979	2	1			WRD-KS, 1979, vol. 1	
1981	3 2	1 2			WRD-KS, 1981	
1983	·				WRD-KS, 1983	
	06847780 Prai	rie Dog Cre	ek near	Gem, K	ansas	
1966			1		WSP 1993	
	06847790 Prai	rie Dog Cre	ek near	Leovil	e, Kansas	
1966			1		WSP 1993	
	06047000 0034	rie Dog Cre	ek above	Keith	Sebelius Lake, Kansas Jabove Norton Reservoi	Drainage area = 590 square miles
1975 1976 1977 1978 1979 1980 1981	(Prior to Dec	. 28, 1980 terpretive	publish	ed as 3 ions 3	: Ost.2, Ost.4 WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983	
1975 1976 1977 1978 1979 1980	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1	terpretive	publicat	2 2 rton.	Y: Ost.2, Ost.4 WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983	Drainage area = 684 square miles
1975 1976 1977 1978 1979 1980 1981 1983	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 06848000 Prais Summary or in	rie Dog Creterpretive	publicat	2 2 rton.	Y: Ost.2, Ost.4 WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983 Yansas Yansas YE Col.1, Ost.2, Ost.3	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake
1975 1976 1977 1978 1979 1980 1981 1983	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive	publicat	2 2 rton.	Y: Ost.2, Ost.4 WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1981, vol. 1 WRD-KS, 1983 Gansas Col.1, Ost.2, Ost.3 WSP 1102 WSP 1132	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake Do.
1975 1976 1977 1978 1979 1980 1981 1983	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive	publicat	2 2 rton.	Y: Ost.2, Ost.4 WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1983 Gansas COl.1, Ost.2, Ost.3 WSP 1102 WSP 1132 WSP 1162	Drainage area = 684 square miles s, Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do.
1975 1976 1977 1978 1979 1980 1981 1983 1947 1948 1949 1950	(Prior to Dec Summary or in 7 3 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93	publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983 Gansas : Col.1, Ost.2, Ost.3 WSP 1102 WSP 1132 WSP 1162 WSP 1187	Drainage area = 684 square miles i, Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do. Do. Do.
1975 1976 1977 1978 1979 1980 1981 1983 	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive	publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1981, vol. 1 WRD-KS, 1983 WSD-KS, 1983 WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251	Drainage area = 684 square miles s, Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do.
1970 1975 1976 1977 1978 1979 1980 1981 1983 	(Prior to Dec Summary or in	rie Dog Creterpretive 30 76 93 41 31	publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; WRD-KS, 1979, vol. 1 WRD-KS, 1981, vol. 1 WRD-KS, 1983 Gansas (Col.1, Ost.2, Ost.3) WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1451	Drainage area = 684 square miles 1, Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do. Do. Do. Do. Do. Do.
1975 1976 1977 1978 1979 1980 1981 1983 	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93 41	publicat ek at No publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983 Gansas WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1251 WSP 1572	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do. Do. Do. Do. Do. Do. Do. Do.
1975 1976 1977 1978 1979 1980 1981 1983 1947 1948 1950 1951 1952 1956 1958	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93 41 31	publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1983 Gansas : Col.1, Ost.2, Ost.3 WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1451 WSP 1572 WSP 1993	Drainage area = 684 square miles i, Ost.4, Tas.1 Before Keith Sebelius Lake Do.
1975 1976 1977 1978 1978 1979 1980 1981 1983 1949 1950 1951 1952 1955 1956 1958 1966	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93 41 31	publicat ek at No publicat	2 2 rton.	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1983 Gansas WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1251 WSP 1572	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake Do. Do. Do. Do. Do. Do. Do. Do. Do.
1975 1976 1977 1978 1979 1980 1981 1983 	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93 41 31 2	publicat ek at No publicat	tons 3	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1983 WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1451 WSP 1451 WSP 1451 WSP 1572 WSP 1993 WRD-KS, 1976 USGS-L	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake Do.
1975 1976 1977 1978 1978 1979 1980 1981 1983 1949 1950 1951 1952 1955 1956 1958 1966	(Prior to Dec Summary or in 7 3 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rie Dog Creterpretive 30 76 93 41 31 2	publicat ek at No publicat	tons 3	WSP 2155 USGS-L WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1983 WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1451 WSP 1451 WSP 1451 WSP 1572 WSP 1993 WRD-KS, 1976 USGS-L	Drainage area = 684 square miles , Ost.4, Tas.1 Before Keith Sebelius Lake Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nu Nu	mber of an	alyses			olication1/ office file2/	Additional information
year	Suspended- Concen- tration	sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		office files	
	06848500 Prair Summary or int					nnsas t.2, Ost.4, Ost.5	Drainage area = 1,007 square miles
1 966 1978			1		WSP : USGS-		Downstream from Keith Sebelius Lake
	06849500 Repub Summary or int					ty Dam, Nebraska s.1	Drainage area = 20,753 square miles
1953	<u>4</u> / 5/				SSMR	1949-54	Downstream from Harlan County Reservoir
1954 1955					CCMD	do. 1955-59	Do. Do.
1956	do. do.				SSMK	do.	Do.
1957	do.					do.	Do.
1958	do.					do.	Do.
1959	do.					do.	Do.
1960	do.				SSMR	1960-64	Do.
1961 1962	do.					do.	Do. Do.
1963	do. do.					do.	Do.
1964	do.					do.	Do.
1965	do.				SSMR	1965-69	Do.
1966	do.					do.	Do.
1967	do.					do.	Do.
	06850500 Repub Summary or int						Drainage area = 20,800 square miles
1949	5/				SSMR	1949-54	Before Harlan County Reservoir
1950	do.					do.	Do. To the Do
1951	do.					do.	Do.
1952	do.					do.	Downstream from Harlan County Reservoir
1953 1961	do. do.				CCMD	do. 1960-64	Do. Do.
1962	do.				JJ1111	do.	Do.
1963	do.					do.	Do.
1964	do.					do.	Do.
1965	do.				SSMR	1965-69	Do.
1966 1967	do.					do.	Do. Do.
1968	do. do.					do. do.	Do.
	06853000 Repub Summary or int						Drainage area = 22,060 square miles
1961	4 /				SSMR	1960-64	Downstream from Harlan County Reservoir
1962	<u>5</u> /					do.	Do.
1963	do.					do.	Do.
1964	do.				CCMD	do.	Do.
1965 1966	do. do.				SOME	1965-69 do.	Do. Do.
1967	do.					do.	Do.
1968	do.					do.	Do.
	06853500 Repub Summary or int	lican Rive erpretive	r near H publicat	ardy, N ions 3	ebras : Os	ska t.2, Ost.4, Ost.5	Drainage area = 22,401 square miles , Tas.1
1947 1950	1				WSP :		Before Harlan County Reservoir
1961	4/					10. 1960-64	Do. Downstream from Harlan County Reservoir
1962	<u>5</u> /					10.	Do.
1963	do.					do.	Do.
1964	do.					io.	Do.
	06853780 White	Rock Cree	k near S	alem, K	ansas		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

O White 1 2 1 6 5 8 7 O White or into	Rock Creerpretive 63 51 11 17 3 lican Riverpretive 2 2 1 2 1	mater- ial size eek near 1	ial size Burr Oak vewell tions 3/	, Kansas WSP 1993 WRD-KS, 1976 WRD-KS, 1989, WRD-KS, 1980, WRD-KD, 1981 WRD-KD, 1981 WRD-KS, 1982 WRD-KS, 1983	Drainage area = 227 square miles vol. 1 Drainage area = 345 square miles
1 2 1 6 5 8 7 O White or into 5 5 1 O Repubor into 3 14	Rock Creerpretive 63 51 11 17 3 lican Riverpretive 2 2 1 2 1	eek at Lo e publica	vewell, tions 3/ andia, K tions 3/	WSP 1993 WRD-KS, 1976 WRD-KS, 1978 WRD-KS, 1989, WRD-KS, 1980, WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983 Kansas : Col.1, Ost.3 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1251 WSP 1291 WSP 1351 WSP 1993 WRD-KS, 1982 ansas : Ost.3 WSP 1883 WSP 2095 WSP 2145 WSP 2155	Drainage area = 345 square miles Tas.1 Before Lovewell Reservoir Do. Do. Do. Do. Do. Do. Do. Do
2 1 6 5 8 7 0 White or into 5	Rock Creerpretive 63 51 11 17 3 lican Riverpretive 2 2 1 2 1	eek at Love publica 1 ver at Sc. e publica	vewell 3/ tions 3/ andia, K	WRD-KS, 1976 WRD-KS, 1978 WRD-KS, 1978 WRD-KS, 1980, WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983 Kansas : Col.1, Ost.3 WSP 1162 WSP 1187 WSP 1187 WSP 1251 WSP 1251 WSP 1251 WSP 1251 WSP 1291 WSP 1351 WSP 1993 WRD-KS, 1982	Drainage area = 345 square miles Tas.1 Before Lovewell Reservoir Do. Do. Do. Do. Do. Downstream from Lovewell Reservoir Do. Drainage area = 22,903 square mile Downstream from Harlan County and Lovewell Reservoir Do. Do. Do. Do.
or into 5 1 O Repubor into 3 14 West 1	63 51 11 17 3 lican Riverpretive	e publica 1 ver at Sce publica 7 6	andia, K	: Col.1, Ost.3 WSP 1162 WSP 1187 WSP 1198 WSP 1251 WSP 1251 WSP 1351 WSP 1351 WSP 1993 WRD-KS, 1982	Before Lovewell Reservoir Do. Do. Do. Do. Do. Do. Downstream from Lovewell Reservoir Do. Drainage area = 22,903 square mile Downstream from Harlan County and Lovewell Reservoir Do. Do.
1 O Repubor into 3 14 O West 1	51 11 17 3 lican Riverpretive 2 2 1 2	ver at Sc. e publica 7 6	andia, K tions 3/	WSP 1187 WSP 1198 WSP 1251 WSP 1251 WSP 1291 WSP 1351 WSP 1993 WRD-KS, 1982 ansas: 0st.3 WSP 1883 WSP 2095 WSP 2145 WSP 2155	Do. Do. Do. Do. Do. Do. Do. Do. Downstream from Lovewell Reservoir Do. Drainage area = 22,903 square mile Downstream from Harlan County and Lovewell Reservoir Do. Do.
or into	erpretive 2 2 1 2 1	e publica 7 6	tions 3/	: Ost.3 WSP 1883 WSP 2095 WSP 2145 WSP 2155	Downstream from Harlan County and Lovewell Reservoir Do. Do.
14) West	2 1 2 1	6	!	WSP 2095 WSP 2145 WSP 2155	Reservoir Do. Do.
14) West	1 2 1	6	!	WSP 2145 WSP 2155	Do. Do.
5	Buffalo (1149	
-		Creek nea	r Jewell	, Kansas	Drainage area = 15.2 square miles
. 3 . 3			•	SCS do. do.	
. 1				do.	
	Buffalo (Creek at	Jewell,	Kansas	Drainage area = 16.8 square miles
5 . 3 . 3 . 1			(SCS do. do. do.	
Buffal or inte	lo Creek erpretive	near Jam e publica	estown tions 3/	Kansas : Ost.2, Ost.4	Drainage area = 330 square miles
2				MRD-KS, 1977	
					Drainage area = 56.0 square miles
					Drainage area = 23,560 square mile Ost.4, Ost.5, Tas.1
	3		WSP	1883, SSMR 196	0-64 Downstream from Harlan County and Lovewell Reservoir
•				do. do.	Do. Do. Do. Do. Do.
	2) Wolf (or into	O Wolf Creek ne. or interpretive Republican Rivor interpretive 3	or interpretive publica 2) Wolf Creek near Concoror interpretive publica) Republican River at Coror interpretive publica 3	2 Wolf Creek near Concordia, Kanor interpretive publications 3/ Republican River at Concordia, or interpretive publications 3/ 3 WSP	O Wolf Creek near Concordia, Kansas or interpretive publications 3/: Ost.2, Ost.4, O Republican River at Concordia, Kansas or interpretive publications 3/: Ost.2, Ost.3, 3 WSP 1883, SSMR 1960-64 do. do. SSMR 1965-69 do. do. do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	·	!	Number o	f ana	yses		Publication or office fi		Additional information
		n-	i-sedime Particl size		Bed- mater- ial size	Bank- mater ial size		163	
	06856100	West	: Creek	near '	Γalmo,	Kansas			Drainage area = 42.0 square miles
1977 1982		1	1				WRD-KS, 1977 WRD-KS, 1982		
	06856600 Summary o	Repu r i	ublican nterpret	River	at Cl ublica	ay Cento	er, Kansas /: Alb.1, Col.	1, Mun.1, Ost.	Drainage area = 24,570 square miles 2, Ost.3, Ost.4, Tas.1
1949	<u>5</u> /		11		4		SSMR 1949-54		-O Before Harlan County Lake
1950 1951	do. do.		10 17					do. do.	Do. Do.
1952	do.		17				SSMR 1949-54,		Do.
1953	do.						do.	, 0002-0	Downstream from Harlan County Lake
1954	do.						do.		Do.
1957		8.	17		11		WSP 1521	Downstream from Reservoir	m Harlan County Lake and Lovewell
1958	<u>8/</u>		12		3		WSP 1572		Do.
1959	do.		10		4		WSP 1643		Do.
1960	do.		16		8		WSP 1743		Do.
1961	do.		21		17		WSP 1883		Do.
1962	do.		20		12		WSP 1943		Do.
1963 1969	do.	3	6 2		2		WSP 1949 WRD 2145		Do. Do.
1970		7	2				WRD-KS, 1970		Do.
1976		í	2				WRD-KS, 1976		Do.
1978		ī					WRD-KS, 1978		Do.
1979		ī					WRD-KS, 1979,	vol. 1	Do.
1980	15	3	139				WRD-KS, 1980,		Do.
1981	<u>7</u> /		134				WRD-KS, 1981		Do.
1982	10	19	106				WRD-KS, 1982		Do.
1983		7	7		1		WRD-KS, 1983		Do.
	06856990	Repu	ublican	River	at Wa	kefield	, Kansas		Drainage area = 24,700 square miles
1929	6/	3					HD-238	Befo	ore large reservoirs
1930	6/ 1	2					do.	-	Do.
1931	<u>ē/</u> i	.2					do.		Do.
1932	<u>6</u> / 1	.2					do.		Do.
	06857000	Repu	ublican	River	at Mi	lford,	Kansas		Drainage area = 24,900 square miles
1961		5					WSP 1883		tream from Harlan County Lake and Hell Reservoir, before Milford Lake
	06857100	Repu	ıbl ican	River	be low	Milfor	d Dam, Kansas		Drainage area = 24,880 square miles
1967	<u>4</u> / 5/						SSMR 1965-69	Downs	tream from Milford Lake
1968 1969	<u>5</u> / do.						do. do.		Do. Do.
		Rep	ublican	River	near	Junctio	n City, Kansas	•	
1907 1957	<u>9</u> / 2	25 1	1				WSP 273 USGS-LN	Downs	re large reservoirs stream from Harlan County Lake and well Reservoir, before Milford Lake
							City, Kansas cations 3/: ()st.2	
	06858400	Nort	th Fork	Smoky	H111	River n	ear Goodland,	Kansas	
1966					1		WSP 1993		
					•				

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	N	umber of ar	nalyses		Publication1/ or office file2/	Additional information
year	Suspended Concen- tration	-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
	06858500 Nort Summary or in				ear McAllaster, Kansas ': Ost.4	Drainage area = 670 square miles
1966 1978 1979 1981 1983	1 1 4 1		1		WSP 1993 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1982 WRD-KS, 1983	
					near Scott City, Kan : Col.1, Ost.2, Ost.5	Sas Drainage area = 1,460 square miles
1958 1961 1964 1965 1966 1967 1968 1971 1972 1975 1976 1977 1978 1979 1980	1 3 5 do. do. do. do. 3 3	2 4 1 6 2 1 2 1	1 2 1 1	2	USGS-L WSP 1883 WSP 1956 WSP 1963, SSMR 1965-6 WSP 1993, SSMR 1965-6 WSP 2013, SSMR 1965-6 WSP 2013, SSMR 1965-6 WSP 2145, SSMR 1965-6 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 USGS-L WRD-KS, 1979, vol. 1 USGS-L	9 9 9
	6860000 Smok				Gansas : Ost.2, Ost.5	Drainage area = 3,555 square miles
1966 1978			1	2	WSP 1993 USGS-L	
0	06860300 Sout	h Branch Ha	ckberry	Creek r	near Orion, Kansas	Drainage area = 49.6 square miles
1964 1965 1966 1967 1968	3 6 1 2 3	2 1 1 2			WSP 1956 WSP 1963 WSP 1993 WSP 2013 WSP 2095	
0	6860500 Hack	berry Creek	near G	ove, Kar	nsas	Drainage area = 426 square miles
1977	1				WRD-KS, 1977	
	06861000 Smok Summary or in					Drainagea area = 5,220 square miles
1966 1971 1976 1977 1978 1979 1980 1981	1 1 3 1 1 2 4	3 1	1	2	WSP 1993 WRD-KS, 1971, part 2 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	
0 S	06862500 Smok Summary or in	y Hill Rive	er near l	Ellis, k	Kansas : Col.1, Ost.3, Tas.1	Drainage area = 5,630 square miles
1945 1946 1947 1948 1949 1950 1951	6/ 3 6/ 6 7/ 8/ do. do.	5 42 56			USBR-D do. WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198	Before Cedar Bluff Reservoir Do. Do. Do. Do. Do. Do. Do. Do. Downstream from Cedar Bluff Reservoir

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

	· 	Number of a	nalyses		Publication 1/ or office file 2/	Additional information
year		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files	
	06862700 Smc Summary or i				en, Kansas : Ost.2, Ost.4, Ost.5	Drainage area = 5,750 square miles
	06863000 Smo	ky Hill Riv	er at Pfe	ifer, Ka	ansas	Drainage area = 6,033 square miles
1981	1				WRD-KS, 1981	Downstream from Cedar Bluff Reservoir
	06863300 Big Summary or i	Creek near nterpretive	Ogallah, publicat	Kansas tons 3/	: Col.1, Ost.3, Tas.1	Drainage area = 297 square miles
1956	<u>8</u> /	9			WSP 1451	
1957 1958	do. do.	17 10			WSP 1521 WSP 1572	
1959	do.	••			WSP 1643	
1962 1966	do.		1		WSP 1943 WSP 1993	
	06863500 Big Summary or i	Creek near nterpretive	Hays, Ka publicat	nsas ions 3/	: Ost.2, Ost.4, Ost.5	Drainage area = 594 square miles
1958	2	2			WSP 1572	
1966 1976	3	2	1		WSP 1993	
1979	2	2			WRD-KS, 1976 WRD-KS, 1979, vol. 1	
1980	6			1	WRD-KS, 1980, vol. 1	
1981 1982	10 7				WRD-KS, 1981 WRD-KS, 1982	
1983	2				WRD-KS, 1983	
	06863700 Bio					
	_	Creek trib	utary nea	r Hays,	Kansas	Drainage area = 6.19 square miles
1981	1	Creek trib	utary nea	-	Kansas WRD-KS, 1981	Drainage area ≈ 6.19 square miles
	0686390	0 North For	k Big Cre	ek near		Drainage area = 6.19 square miles Drainage area = 54 square miles
1981	0686390	0 North For	k Big Cre	ek near lication	WRD-KS, 1981 Victoria, Kansas ns 3/: 0st.2, 0st.4 WRD-KS, 1976	
1981 1976 1978	1 0686390 Summary	0 North For	k Big Cre	ek near lication	Victoria, Kansas ns 3/: Ost.2, Ost.4 dRD-KS, 1976 USGS-L	
1981	1 0686390 Summary	0 North For	k Big Cre	ek near lication	WRD-KS, 1981 Victoria, Kansas ns 3/: 0st.2, 0st.4 WRD-KS, 1976	
1981 1976 1978 1981	1 0686390 Summary 1 1 1	O North For or interpr 1	k Big Creetive pub	ek near lication 2	WRD-KS, 1981 Victoria, Kansas ns 3/: 0st.2, 0st.4 WRD-KS, 1976 USGS-L WRD-KS, 1981	
1981 1976 1978 1981 1982	0686390 Summary 1 1 1 1 0686400 Summary	O North For or interpr 1 O Smoky Hil	k Big Creetive pub	ek near lication 2 2 ear Russ	Victoria, Kansas ns 3/: Ost.2, Ost.4 MRD-KS, 1976 USGS-L MRD-KS, 1981 WRD-KS, 1982 sell, Kansas ns 3/: Ost.4,	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir
1981 1976 1978 1981 1982 1941 1960	0686390 Summary 1 1 1 1 0686400 Summary	O North For or interpr 1	k Big Creetive pub	ek near lication 2 	Victoria, Kansas ns 3/: Ost.2, Ost.4 WRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 Sell, Kansas ns 3/: Ost.4,	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir
1981 1976 1978 1981 1982	0686390 Summary 1 1 1 1 0686400 Summary	O North For or interpr 1 O Smoky Hil	k Big Creetive pub	ek near lication 2 	Victoria, Kansas ns 3/: Ost.2, Ost.4 MRD-KS, 1976 USGS-L MRD-KS, 1981 WRD-KS, 1982 sell, Kansas ns 3/: Ost.4,	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir
1981 1976 1978 1981 1982 1941 1960 1965 1966	0686390 Summary 1 1 1 0686400 Summary 12 3 5/ do.	O North For or interpr 1 O Smoky Hil	k Big Creetive pub	ek near lication 2 	Victoria, Kansas ns 3/: Ost.2, Ost.4 WRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do.
1981 1976 1978 1981 1982 1941 1960 1965 1966	0686390 Summary 1 1 1 1 0686400 Summary 12 3 5/	O North For or interpr 1 O Smoky Hil	k Big Creetive pub	ek near lication 2 	Victoria, Kansas ns 3/: Ost.2, Ost.4 WRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 sell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do.
1981 1976 1978 1981 1982 1941 1960 1965 1966 1967 1968 1969	0686390 Summary 1 1 1 0686400 Summary 12 3 5/ do. do. do.	O North For or interpr 1 O Smoky Hil or interpr	k Big Creetive pub	ek near lication 2 	Victoria, Kansas ns 3/: Ost.2, Ost.4 MRD-KS, 1976 USGS-L MRD-KS, 1981 WRD-KS, 1982 Seell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do. do. do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do. Do. Do.
1981 1976 1978 1981 1982 1941 1960 1965 1966 1967 1968 1969	0686390 Summary 1 1 1 0686400 Summary 12 3 5/ do. do. do.	O North For or interpr 1 O Smoky Hill or interpre	k Big Creetive pub	ek near lication 2 ear Russ lication	Victoria, Kansas ns 3/: Ost.2, Ost.4 MRD-KS, 1976 USGS-L MRD-KS, 1981 WRD-KS, 1982 Sell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do. do. do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do. Do. Do. Do.
1981 1976 1978 1981 1982 1941 1960 1965 1966 1967 1968 1969	1 0686390 Summary 1 1 1 1 1 0686400 Summary 12 3 5/ do.	O North Form or interpretate of the second o	k Big Creetive pub River netive pub er near B publicat	ek near lication 2 ear Rus: lication unker H ions 3/	Victoria, Kansas ns 3/: Ost.2, Ost.4 WRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 Sell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do. do. do. do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do. Do. Do. Do. Do. Do
1981 1976 1978 1981 1982 1941 1960 1965 1966 1967 1968 1969	1 0686390 Summary 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	O North Form or interpretate of the second o	k Big Creetive pub River netive pub er near B publicat	ek near lication 2 ear Russ lication unker H ions 3/	Victoria, Kansas ns 3/: Ost.2, Ost.4 WRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 Sell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do. do. do. do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do. Do. Do. Do. Do. Do. Drainage area = 7,075 square miles Downstream from Cedar Bluff Reservoir Do. Drainage area = 7,580 square miles
1981 1976 1978 1981 1982 1941 1960 1965 1966 1967 1968 1969	1 0686390 Summary 1 1 1 1 1 0686400 Summary 12 3 5/ do.	O North Form or interpretate of the second o	k Big Creetive pub River netive pub er near B publicat	ek near lication 2 ear Russ lication unker H ions 3/	Victoria, Kansas ns 3/: Ost.2, Ost.4 MRD-KS, 1976 USGS-L WRD-KS, 1981 WRD-KS, 1982 Sell, Kansas ns 3/: Ost.4, USBR-D MSP 1743 SSMR 1965-69 do. do. do. do.	Drainage area = 54 square miles Drainage area = 6,965 square miles Before Cedar Bluff Reservoir Downstream from Cedar Bluff Reservoir Do. Do. Do. Do. Do. Do. Do. Do

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

ater		Number of a	nalyses		Publication1/ or office file2/	Additional information
ear	Suspended	1-sediment	Bed-	Bank-	or office THES	
	Concen- tration	Particle size	mater- ial size	mater- ial size		
06	864500 Smok	y Hill Rive	er at Ell	sworth,	KansasContinued	
947	6/ 12				USCE-0	Before Cedar Bluff Reservoir
948	10/14	14			USCE-KC, USCE-0	Do.
949 950	5/	35 32	1		WSP 1162, SSMR 1949-	
51	do. do.	18	1		SSMR 1949-54, USCE-K do.	C, USCE-O Do. Downstream from Cedar Bluff Reser
52	do.	10			SSMR 1949-54, USCE-0	Do.
53	do.				do.	Do.
54	do.				do.	Do.
55	do.				SSMR 1955-59	Do.
56	do.				SSMR 1955-59, USCE-K	
57	do.				SSMR 1955-59	Do.
58 59	do. do.				do.	Do.
60	do.	3			do. WSP 1743, SSMR 1960-	Do. 64 Do.
61	do.	J			SSMR 1960-64	Do.
62	do.				do.	Do.
63	do.				do.	Do.
64	do.				do.	Do.
65	do.				SSMR 1965-69	Do.
66	do.				do.	Do.
67 66	do.		1		do. WSP 1993	Do. Do.
68	1		1		WSP 2095	Do.
79	ī				USGS-L	Do.
50 51 553 555 557 559 661 663 666 667 78	do.				do. do. do. do. do. SSMR 1955-59 do. do. do. do. SSMR 1960-64 do.	Do.
Su	-			tions 3/	: Col.1, Ost.3, Tas.:	
07 08	9/ 26 9/ 3 4/	•-			WSP 273 do.	Before Kanopolis Lake Do.
51 52	<u>4</u>) 5/	22			USCE-KC, SSMR 1949-54	
52 5 3	do.				SSMR 1949-54, USCE-0 do.	Do. Do.
54	do.				do.	Do.
55	do.				SSMR 1955-59	Do.
56	do.				do.	Do.
57	do.				do.	Do.
58 50	do.				do.	Do.
5 9 60	do. do.				do. SSMR 1960-64	Do. Do.
61	do.				do.	Do.
52	do.				do.	Do.
					do.	Do.
63	do.				401	50.
	do. do.				do. SSMR 1965-69	Do. Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year		Number of a	nalyses	Publication 1/ or office file 2/	Additional information
, Cui	Suspended Concen- tration	Particle size	mater- mai	ank- ater- al ize	
	06866490 Dry	Creek at M	entor, Kans	as	Drainage area = 37.0 square miles
1977 1981 1982	1 1 1	1		WRD-KS, 1977 WRD-KS, 1981 WRD-KS, 1982	
	06866500 Smok Summary or in			tor, Kansas ns 3/: Ost.2, Ost.4, O	Drainage area = 8,358 square mile
929	<u>6</u> / 3			HD-238	Before Kanopolis Lake
1930 1931	6/ 12 6/ 5 6/ 9			do. do.	Do. Do.
1932	<u>6</u> / 9			do.	Do.
1960 1975	3 1	1		WSP 1743	Downstream from Kanopolis Lake Do.
1976	i	1		WRD-KS, 1975 WRD-KS, 1976	Do.
1979 1981	1	1		WRD-KS, 1979, vol WRD-KS, 1981	Do.
	06866900 Sali Summary or in			y, Kansas ns 3/: Col.1, Jor.1, (Drainage area = 696 square miles Ost.3, Tas.1
1956	<u>1</u> /	14		WSP 1451	
1957 1958	do. 8/	7 11		WSP 1521 do.	
1959	do.	••		WSP 1643	
	06867000 Sali	ine River n	aar Duccall		
					Drainage area = 1,502 square mile Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946	Summary or in 7/			ns 3/: Col.1, Jor.1, (WSP 1102	
1946 1947	Summary or ir $\frac{7}{8}$	iterpretive		ns ⅓: Col.1, Jor.1, (WSP 1102 do.	
1946 1947 1948 1949	Summary or in 7/8/do.do.	terpretive 5 27		ns 3/: Col.1, Jor.1, (WSP 1102 do. WSP 1132 WSP 1162	
1946 1947 1948 1949	Summary or in $\frac{7}{8}$ /do.do.do.	terpretive 5 27 60		ns 3/: Col.1, Jor.1, (WSP 1102 do. WSP 1132 WSP 1162 WSP 1187	
1946 1947 1948 1949 1950	Summary or in 7/8/do.do.	5 27 60 32		ns 3/: Col.1, Jor.1, (WSP 1102 do. WSP 1132 WSP 1162	
1946 1947 1948 1949 1950 1951 1958	Summary or in 7/8/4 do. do. do. do.	terpretive 5 27 60	publication	ns 3/: Col.1, Jor.1, C WSP 1102 do. WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1743	
1946 1947 1948 1949 1950 1951 1958 1960 1964	Summary or in 7/ 8/ do. do. do. do.	5 27 60 32		ns 3/: Col.1, Jor.1, C	
1946 1947 1948 1949 1950 1951 1958 1960 1964 1966 1976	Summary or in 7/8/do. do. do. do. do. do. 2	5 27 60 32	publication	ms 3/: Col.1, Jor.1, C	
1946 1947 1948 1949 1950 1951 1958 1960 1964 1966 1976	Summary or in 7/8/8/do. do. do. do. do. do. 2 2 2	5 27 60 32	publication	MSP 1102 do. MSP 1132 WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1743 WSP 1996 WSP 1993 WRD-KS, 1976 WRD-KS, 1977	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1960 1964 1976 1977 1979	Summary or in 7/8/do. do. do. do. do. do. do. do. do. 84	5 27 60 32	publication	ms 3/: Col.1, Jor.1, Col.1, Jor.1, Col.1, Jor.1, Col. MSP 1102	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1960 1964 1976 1977 1979 1980 1981	Summary or in 7/8/do. do. do. do. do. do. 9 2 2 2 2 8 9	5 27 60 32 2	publication	ms 3/: Col.1, Jor.1, Col.1, Jor.1, Col.1, Jor.1, Col. MSP 1102	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1960 1964 1977 1979 1980 1981 1982	Summary or in 7/8/do. do. do. do. do. do. do. do. do. 84	5 27 60 32	publication	ms 3/: Col.1, Jor.1, Col.1, Jor.1, Col.1, Jor.1, Col. MSP 1102	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1966 1976 1977 1979 1980 1981 1982 1983	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	5 27 60 32 2	publication 1 1	MSP 1102 do. MSP 1102 do. MSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1743 WSP 1996 MSP 1993 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1960 1964 1966 1977 1979 1980 1981 1982	Summary or in 7/8/do. do. do. do. do. do. do. Summary or in 506867500 Para	5 27 60 32 2	publication 1 1	MSP 1102 do. MSP 1102 do. MSP 1132 MSP 1162 MSP 1187 MSP 1198 USGS-L WSP 1743 MSP 1956 MSP 1993 MRD-KS, 1976 WRD-KS, 1977 MRD-KS, 1979, vol WRD-KS, 1980, vol WRD-KS, 1982 WRD-KS, 1983 **Total Coll, Jor.1, Office of the collection of the collectio	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1960 1977 1979 1981 1982 1983	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	5 27 60 32 2	publication 1 1	MSP 1102 do. MSP 1132 MSP 1132 MSP 1162 MSP 1187 MSP 1198 USGS-L MSP 1743 MSP 1956 MSP 1993 MRD-KS, 1977 MRD-KS, 1977 MRD-KS, 1980, vol MRD-KS, 1981 MRD-KS, 1982 MRD-KS, 1983	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1966 1976 1979 1980 1981 1982 1983	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 dise Creek sterpretive 3 12 50	publication 1 1	MSP 1102 do. MSP 1102 do. MSP 1132 MSP 1162 MSP 1162 MSP 1187 MSP 1198 USGS-L MSP 1956 MSP 1993 MRD-KS, 1976 MRD-KS, 1977 MRD-KS, 1977 MRD-KS, 1980, vol MRD-KS, 1982 MRD-KS, 1983	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1966 1976 1979 1980 1981 1982 1983	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	5 27 60 32 2 2	publication I I near Parad publication	MSP 1102 do. MSP 1102 do. MSP 1132 MSP 1162 MSP 1187 MSP 1198 USGS-L MSP 1743 MSP 1956 MSP 1993 MRD-KS, 1976 MRD-KS, 1977 MRD-KS, 1980, vol MRD-KS, 1980, vol MRD-KS, 1981 MRD-KS, 1983 ise, Kansas ns 3/: Col.1, Jor.1, (c) MSP 1102 MSP 1102 MSP 1132 MSP 1162	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1946 1947 1948 1949 1950 1951 1958 1966 1976 1979 1980 1981 1982 1983	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 adise Creek sterpretive 3 12 50 29	publication I I	ms 3/: Col.1, Jor.1, 0 WSP 1102 do. WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1993 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1980, vol WRD-KS, 1982 WRD-KS, 1983 ise, Kansas ns 3/: Col.1, Jor.1, 0 WSP 1102 WSP 1132 WSP 1132 WSP 1162 WSP 1187 WSP 1198 2 USGS-L	Ost.2, Ost.3, Ost.4, Ost.5, Tas.1 .
1946 1947 1948 1949 1950 1951 1958 1960 1966 1977 1979 1981 1982 1983 1947 1948 1949 1950 1951 1978	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 adise Creek sterpretive 3 12 50 29	publication I I	MSP 1102 do. WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1956 WSP 1993 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983 **Sea Kansas ns 3/*: Col.1, Jor.1, 0 WSP 1102 WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L Kansas USBR-D	Drainage area = 1,900 square miles Drainage area = 1,900 square miles
1946 1947 1948 1949 1950 1951 1958 1966 1976 1979 1980 1981 1982 1983 	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 adise Creek sterpretive 3 12 50 29	publication I I	ms 3/: Col.1, Jor.1, (c) WSP 1102 do. WSP 1132 WSP 1162 WSP 1187 WSP 1198 USGS-L WSP 1993 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983 ise Kansas ms 3/: Col.1, Jor.1, (c) WSP 1102 WSP 1102 WSP 1102 WSP 1187 WSP 1198 USGS-L Kansas USBR-D do.	Drainage area = 212 square miles Ost.2, Ost.3, Ost.4, Ost.5, Tas.1 Drainage area = 1,900 square mile
1946 1947 1948 1949 1950 1951 1958 1960 1977 1979 1980 1981 1982 1983 1947 1948 1949 1950 1951 1978	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 adise Creek sterpretive 3 12 50 29	publication I I	MSP 1102 do. MSP 1102 do. MSP 1132 MSP 1162 MSP 1162 MSP 1198 USGS-L WSP 1743 MSP 1956 MSP 1993 MRD-KS, 1977 MRD-KS, 1977 MRD-KS, 1980, vol MRD-KS, 1982 MRD-KS, 1982 MRD-KS, 1982 MRD-KS, 1982 MRD-KS, 1983 MSP 1102 MSP 1102 MSP 1132 MSP 1162 MSP 1187 MSP 1187 MSP 1198 2 USGS-L Kansas USBR-D do. do. USGS-L	Drainage area ≠ 212 square miles Drainage area = 1,900 square mile Before Wilson Lake Do. Do. Do.
1946 1947 1948 1949 1950 1951 1958 1966 1976 1977 1980 1981 1982 1983 1947 1948 1949 1950 1951 1978	Summary or in 7/8/do. do. do. do. do. do. do. do. do. do.	sterpretive 5 27 60 32 2 1 adise Creek sterpretive 3 12 50 29	publication I I	MSP 1102 do. MSP 1102 do. MSP 1132 MSP 1162 MSP 1162 MSP 1187 MSP 1198 USGS-L WSP 1743 MSP 1956 MSP 1993 MRD-KS, 1977 MRD-KS, 1977 MRD-KS, 1980, vol MRD-KS, 1982 MRD-KS, 1983 ARD-KS, 1983 MSP 1102 MSP 1102 MSP 1132 MSP 1162 MSP 1187 MSP 1198 USGS-L Kansas USBR-D do. do. do.	Drainage area ≤ 212 square miles Ost.2, Ost.3, Ost.4, Ost.5, Tas.1 Drainage area = 1,900 square mile Before Wilson Lake Do. Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

year	Suspended				
	Concen- tration	-sediment Particle size	Bed- Bank mater- mate ial ial size size	r-	
	06868500 Wolf Summary or In			e, Kansas 3/: Col.1, Jor.1, Ost.	Drainage area = 261 square miles .3, Tas.1
1907	9/ 29			WSP 273	
1908	<u>9</u> / 5			do.	
1942 1947	<u>"</u> 2			USBR-D WSP 1102	
948	8̄/	5		WSP 1132	
1949	do.	21		WSP 1162	
1950 1951	do. 7	31		WSP 1187, USBR-D WSP 1198	
C	06868700 Nort	h Branch Sp	oillman Creek	near Ash Grove, Kansas	s Drainage area = 26.1 square miles
1971	1	1		WRD-KS, 1971, part 2	2
	06869500 Sali Summary or In				Drainage area = 2,820 square miles 1, 0st.2, 0st.3, 0st.4, 0st.5, Tas.1
929	<u>6/</u> 3			HD-238	Before Wilson Lake
1930 1931	6/ 12 6/ 12			do. do.	Do. Do.
932	<u>\$</u> / 15			do.	Do.
957	25	14		WSP 1521	Do.
958	7/ 11	5		WSP 1572	Do.
959 960	<u>\$</u> /	16 9		WSP 1643, WSP 1743 WSP 1743	Do. Do.
961	do.	38		WSP 1883	Do.
962	do.	8		WSP 1943	Do.
963	do.	9		WSP 1949	Do.
964 965	do. do.	5 5		WSP 1956 WSP 1963	Do. Downstream from Wilson Lake
966	do.	3	1	WSP 1993	Do.
967	do.	7		WSP 2013	Do.
968	₫°.	7	•	WSP 2095	Do.
.969 .970	<u> </u>	13 3	1	WSP 2145 WSP 2155	Do. Do.
971	16	3		WRD-KS, 1971, part 2	
972	3	3	2	WRD-KS, 1972, part 2	
.973 .974	13 12	5 1	2	WRD-KS, 1973, part 2	
975	13	3		WRD-KS, 1974, part 2 WRD-KS, 1975	2 Do. Do.
976	4	-		WRD-KS, 1976	00.
977	4	1	1	WRD-KS, 1977	Do.
.978 .979	3 4	1	2 1	WRD-KS, 1978 WRD-KS, 1979, vol. 1	Do. 1 Do.
980	7	•	2	WRD-KS, 1980, vol. 1	
981	8		1	WRD-KS, 1981	Do.
982 983	2 5		1	WRD-KS, 1982 WRD-KS, 1983	Do. Do.
N	Miscellaneous Summary or In			River Basin	
1953 1 9 57			5 2	WSP 1651	
1958			13	do. do.	
	06869950 Mulb	erry Creek	near Salina	Kansas	Drainage area = 250 square miles
1962	3	3		WSP 1943	
.968 .981	1 1			WSP 2095 WRD-KS, 1981	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	·	Number of a	nalyses		Publication 1/ or office file 2/	Additional information
year		Particle size	Bed- mater- ial size	Bank- mater- ial size		
	06870200 Smoi Summary or I				a, Kansas : Alb.1, Ost.3, Ost.5	Drainage area = 11,730 square miles
1963 1964 1965 1966 1967 1968 1977 1979 1981 1982	8/ do. do. do. do.	9 16 7 4 1 3	8 14 13 4 1 4		WSP 1949 WSP 1956 WSP 1963 WSP 1993 WSP 2013 WSP 2095 WRD-KS, 1977 WRO-KS, 1979, vol. 1 WRD-KS, 1981 WRD-KS, 1982	Downstream from Kanopolis Lake Do. Downstream from Kanopolis and Wilson Lake Do. Do. Do. Do. Do. Do. Do. Do. Do.
	06870300 Gyp	sum Creek ne	ear Gypsu	m, Kans	as	Drainage area = 120 square miles
1982	1	1			WRD-KS, 1982	
	06871000 Nort Summary or I				ade, Kansas : Ost.2, Ost.4, Ost.5	Drainage area = 849 square miles
1958 1966 1968 1975 1977 1978 1979 1980 1981 1982	2 1 1 2 4 2 1 2	2 1 1	1	2	WSP 1572 WSP 1993 WSP 2095 WRD-KS, 1975 WRD-KS, 1977 USGS-L do. WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1982	
1966	06871300 Bow	Creek near	Edmond,		WSP 1993	
1055	06871500 Bow Summary or I	Creek near nterpretive	Publ icat	ions 3/	: Ost.2, Ost.4, Ost.5	Drainage area = 341 square miles
1966			1		WSP 1993	
					rwin, Kansas : Col.1, Ost.3, Tas.1	Drainage area = 1,367 square miles
1945 1948 1949 1950 1951 1952	3 1 9 2/ 8/ 2/	33 32 12			USBR-D WSP 1162 do. WSP 1187 WSP 1198 WSP 1251	Before Kirwin Reservoir Do. Do. Do. Do. Do. Do.
	06871900 Deer Summary or I				Kansas : Ost.2, Ost.4	Drainage area = 65 square miles
1980 1 9 81	2 2				WRD-KS, 1980, vol. 1 WRD-KS, 1981	
	06872300 Mid	dle Beaver	Creek nea	r Smith	Center, Kansas	Drainage area = 71.0 square miles
1964 1965 1967 1968 1969 1970	7 4 9 4 6 7	2 4 3			WSP 1956 WSP 1963 WSP 2013 WSP 2095 WSP 2145 WSP 2155	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year		Number of a	nalyses		Publication $\frac{1}{2}$ or office file $\frac{2}{2}$	Additional information
,		d-sediment Particle size	mater- ial	Bank- mater- ial size		
	06872400 Bea	ver Creek n	ear Smith	Cente	r, Kansas	Drainage area = 165.0 square miles
963	3				WSP 1949	
					ortis (near Downs), Kar : Ost.2, Ost.4, Ost.5	nsas Drainage area = 2,315 (2,390) squa , Tas.l miles
961	_ 3	2			WSP 1883	Downstream from Kirwin Reservoir
962 963	5/				SSMR 1960-64 · do.	Do.
964	do. do.				do.	Do. Do.
965	do.				SSMR 1965-69	Do.
966	do.		1		SSMR 1965-69, WSP 1993	B Do.
967	do.				SSMR 1965-69	Do.
1968 1977	do. 1				do.	Do.
978	1			2	WRD-KS, 1977 USGS-L	Do. Do.
					Webster Reservoir : Ost.2, Ost.4, Ost.5	Drainage area = 1,040 square miles
958	3				WSP 1572	
966	,		1		WSP 1993	
.975 .976	1 1	1			WRD-KS, 1975 WRD-KS, 1976	
977	3				WRD-KS, 1977	
979	5				USGS-L	
980	3				WRD-KS, 1980, vol. 1	
981	3				WRD-KS, 1981	
1982 1983	3 1				WRD-KS, 1982 WRD-KS, 1983	
	06873500 So	uth Fork So	lomon Rive	er at	Alton, Kansas	Drainage area = 1,720 square miles
	-	nterpretive	Publ fc at	ions 3	col.1, Ost.3, Tas.1	
946	<u>7/</u> <u>8</u> /				WSP 1102 do.	Before Webster Reservoir Do.
948	do.	8			WSP 1132	Do.
949	do.	20			WSP 1162	Do.
950	do.	46			WSP 1187	Do.
951	do. 7/	31			WSP 1198	Do.
.952 .966	П	9	1		WSP 1251	Do. Downstream from Kirwin Reservoir
900			<u> </u>		WSP 1993	DOWNSTREAM THOM KITWIN RESERVOIT
	06873700 Kil Summary or I					Drainage area = 52 square miles
980 981	1	1			WRD-KS, 1980, vol. 1 WRD-KS, 1981	
					borne, Kansas : Ost.2, Ost.4, Ost.5,	Drainage area = 2,012 square miles Tas.1
		2			WSP 1572	Downstream from Webster Reservoir
958	2	2			WSP 1883 SSMR 1960-64	Do. Do.
.958 .961	2	2				
.958 .961 .962	2	2			do.	Do.
.958 .961		2			do. do.	Do.
958 961 962 963 964	4/ 5/ do. do.	2	1		do. SSMR 1965-69, WSP 1993	Do. Do.
.958 .961 .962 .963 .964 .966	4/ 5/ do. do.	2	1		do. SSMR 1965-69, WSP 1993 SSMR 1965-69	Do. Do. Do.
958 961 962 963 964 966 967 968	4/ 5/ do. do. do.		1		do. SSMR 1965-69, WSP 1993 SSMR 1965-69 do.	Do. Do. Do.
958 961 962 963 964 966 967 968 975	4/ 5/ do. do. do.	2	1		do. SSMR 1965-69, WSP 1993 SSMR 1965-69 do. WRD-KS, 1975	Do. Do. Do. Do.
.958 .961 .962 .963 .964 .966 .967 .968 .975	4/ 5/ do. do. do.		1	2	do. SSMR 1965-69, WSP 1993 SSMR 1965-69 do. WRD-KS, 1975 WRD-KS, 1976	Do. Do. Do. Do.
958 961 962 963 964 966 967 968 975	4/ 5/ do. do. do.		1	2	do. SSMR 1965-69, WSP 1993 SSMR 1965-69 do. WRD-KS, 1975	Do. Do. Do. Do. Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year		Number of a	nalyses		Publication1/ or office file2/	Additional information
year		d-sediment Particle size	Bed- mater- ial size	Bank- - mater- ial size	or office fries	
(06874500 Eas	t Limestone	Creek r	mear Ion	ia, Kansas	Drainage area = 25.6 square miles
1935	<u>6</u> / 5				SCS	
1936 1937	do. 3 do. 3				do. do.	
1938	do. 3				do.	
(06875000 Elm	Creek near	Ionia,	Kansas		Drainage area = 22.7 square miles
1935	<u>6</u> / 5				SCS	
1936 1937	do. 4				do. do.	
1938	do. 4 do. 4				do.	
(06875500 Eas	t Limestone	Creek a	it Ionia	, Kansas	Drainage area = 51.6 square miles
1935	<u>6/</u> 2				SCS	
(06875900 Sol Summary or I	omon River nterpretive	near Gle Publica	n Elder ations 3	, Kansas 7: Ost.2, Ost.4	Drainage area = 5,340 square miles
	06876000 Sol Summary or I				as /: Col.1, Ost.3,	Drainage area = 5,430 square miles
1907	9/ 27				WSP 273	Before large reservoirs
1908	9/ 5 7/	•			do.	Ďo.
1948 1949	<u>//</u> <u>8</u> /	9 51			WSP 1132 WSP 1162	Do. Do.
1950	do.	76			WSP 1187	Do.
1951	do.	54			WSP 1198	Do.
1952 1960	do. 9	10			WSP 1251 USGS-L	Do. Downstream from Kirwin and Webster Reservoir:
1961	19	5			WSP 1883	Do.
(06876200 Mid	dle Pipe Cr	eek near	Milton	vale, Kansas	Drainage area = 10.2 square miles
1963 1973	1				WSP 2095 WRD-KS, 1973, pa	rt 2
(06876440 Sol	omon River	near Mir	neapoli	s, Kansas	Drainage area = 6,060 square miles
1980	1	1				1. 1 Downstream from Waconda Lake
1981 1982	1	1			WRD-KS, 1981 WRD-KS, 1982	Do. Do.
	06876700 Sal Summary or I				/: Ost.2, Ost.4,	Drainage area = 384 square miles Ost.5
1964	17	2			WSP 1956	
1965	8 12	2 2			WSP 1963	
1967 1968	11	5			WSP 2013 WSP 2095	
1969	13				WSP 2145	
1970 1977	13 2	2 1			WSP 2155 WRD-KS, 1977	
1978	Ĺ	•		2	USGS-L	
1979	1				do.	
1981 1982	1	1			WRD-KS, 1981 WRD-KS, 1982	
(06876900 Sol Summary or I	omon River nterpretive	at Niles Publica	s, Kansa ations 3	s /: Alb.1, Col.1,	Drainage area = 6,770 square miles Mun.1, Ost.2 , Ost.3, Ost.4, Ost.5
1929	<u>6</u> / 3				HD-238	Before large reservoirs
1930	do.12				do.	Do.
1931 1932	do.12 do. 9				do. do.	Do. Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	!	Number of a	nalyses		Publication 1/ or office file 2	
year	Suspended Concen- tration	d-sediment Particle size	Bed- mater- ial size	Bank-	or office files	
06	5876900 Solo	omon River	at Niles	, Kansa	s (continued)	
1957	18	11	3		WSP 1521	Downstream from Kirwin and Webster Reservoirs
1958 1959	17 15	10 2			WSP 1572 WSP 1643	Do. Do.
1960	18	5	-2		WSP 1743	Do.
1961 1962	35 14	23 7	3 2		WSP 1883 WSP 1943	Do. Do.
1963	17	7	2		WSP 1949	Do.
1964	17	6	5		WSP 1963	Do.
1965 1966	17 15	7 4	12 9		do. WSP 1993	Do. Do.
1967	19	7	4		WSP 2013	Do.
1968	0		1		WSP 2095	Do.
1969 1970	8 13	4 2	4 2		WSP 2145 WSP 2155	Downstream from Waconda Lake Do.
1971	14	4	2		WRD-KS, 1971,	
1972 1973	1 11	1 3	1 1		WRD-KS, 1972,	
1973	12	2	2		WRD-KS, 1973, WRD-KS, 1974,	
1975	13	3	3		WRD-KS, 1975	Do.
1976 1977	9 6	2 2	1		WRD-KS, 1976 WRD-KS, 1977	Do. Do.
1978	8	3	2	2	WRD-KS, 1978;	
1979	4	,			WRD-KS, 1979,	
1980 1981	4 3	1	1		WRD-KS, 1980, WRD-KS, 1981	701. 1 Do. Do.
1982	6	2	2		WRD-KS, 1982	Do.
1983	7		1		WRD-KS, 19B3	Do.
06	5877000 Smok	ky Hill Riv	er at Sol	lomon,	Kansas	Drainage area = 18,830 square miles
1929	<u>6</u> / 3				HD-238	Before large reservoirs
1930	do.12				do.	Do.
1931 1932	do.12 do. 9				do. do.	Do. Do.
	977120 Mud	Crook at Al	hilana k	·		Destance area = 97.0 square miles
1973	5877120 Mud 1	Creek at A	bitene, r	\ansas	WPD_KS 1071	Drainage area = 87.0 square miles
					WRD-KS, 1971,	Jai L 2
	377500 Turke mmary or Int				sas : Mun.1, Ost.3	Drainage area = 143 square miles
1959	21	8			WSP 1643	
1960 1961	11 15	5			WSP 1743 WSP 1883	
1962	16	8			WSP 1943	
1963	13	1			WSP 1949	
1964 1965	9 14	2 3			WSP 1956 WSP 1963	
1977	1	•			WRD-KS, 1977	
06	5877600 Smoi	ky Hill Rive	er at Ent Publicat	terpris	e, Kansas /: Col.1, Jor.2	Drainage area = 19,200 square miles , Mun.1, Ost.2, Ost.3, Ost.4, Ost.5, Tas.1
1957	26	16			WSP 1521	Downstream from three large reservoirs
1958	<u>8</u> /	16			WSP 1572	Do.
1959 1960	do. do.	7 6			WSP 1643 WSP 1743	Do. Do.
1961	do.	23			WSP 1883	Do.
1962	do.	10			WSP 1943	Do.
1963 1964	do. do.	11 9	4		WSP 1949 WSP 1956	Do. Do.
1965	do.	7	8		WSP 1963	Downstream from four large reservoirs
1966 1967	do. do.	3 3	7 4		WSP 1993 WSP 2013	Do. Do.
1968	do.	10	6		WSP 2095	Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

'ear			alyses		Publication 1/ or office file 2/	Additional information
		i-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
068	877600 Smoi	y Hill Rive	r at Ente	erprise	, KansasContinued	
.969	<u>8</u> /	19	5		WSP 2145	Downstream from five large reservoirs
.970	do.	3	2		WSP 2155	Do.
.971 .972	do. do.	5 1	2 1		WRD-KS, 1971, part 2 WRD-KS, 1972, part 2	Do. Do.
973	do.	5	î		WRD-KS, 1973, part 2	
.974	do.	5	2		WRD-KS, 1974, part 2	Do.
.975 1976	do. 12	3 1	2 2		WRD-KS, 1975 WRD-KS, 1976	Do. Do.
.977	9	2	2		WRD-KS, 1977	Do.
978	7			2	WRD-KS, 1978; USGS-L	Do.
.979	13	1	1		WRD-KS, 1979, vol. 1	
.980 .981	10 12	1 2	2 2		WRD-KS, 1980, vol. 1 WRD-KS, 1981	Do. Do.
982	4	-	-		WRD-KS, 1982	Do.
.983	⁻8	8	3		WRD-KS, 1983	Do.
		oman Creek n nterpretive				Drainage area = 300 square miles 2, Ost.3, Ost.4, Ost.5
.958	7	6			WSP 1572	
.959 .960	, B				WSP 1643 WSP 1743	
961	22	12			WSP 1883	
962	13	5			WSP 1943	
1976	1	1			WRD-KS, 1976	
1977 1978	1	1		2	WRD-KS, 1977 WRD-KS, 197B; USGS-L	
Sur	mmary or I		Woodbine Publicat	e, Kans ions 3	': Col.1, Mun.1, Ost.	Drainage area = 230 square miles 2, Ost.3, Ost.4, Ost.5
958 1959 1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1969	5 14 12 15 16 13 5/ do. do. do. do. do. do.	terpretive 2 3 5 8 1	Woodbin Publicat	e, kans ions 3	WSP 1572 WSP 1643 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do.	Drainage area = 230 square miles 2, Ost.3, Ost.4, Ost.5
Sur 1,958 1,959 1,960 1,961 1,962 1,963 1,964 1,965 1,966 1,967 1,968 1,969	5 14 12 15 16 13 5/ do. do. do. do. do.	terpretive 2 3 5 8	Public at	ions 3/	: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do.	Drainage area = 230 square miles 2, Ost.3, Ost.4, Ost.5 Drainage area = 44,870 square miles
Sur 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	5 14 12 15 16 13 5/ do. do. do. do. do.	terpretive 2 3 5 8 1	Public at	ions 3/	: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1743 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do.	2, Ost.3, Ost.4, Ost.5 Drainage area = 44,870 square miles Downstream from large reservoirs
Sur 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	mmary or In 5 14 12 15 16 13 5/ do. do. do. do. do.	terpretive 2 3 5 8 1	Public at	ions 3/	: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do.	2, Ost.3, Ost.4, Ost.5 Drainage area = 44,870 square miles Downstream from large reservoirs Do.
Sur 958 959 960 961 962 963 964 965 966 967 968 9969 068 999 068	mmary or In 5 14 12 15 16 13 5/ do. do. do. do. do. do. 1 1 879200 Cla	sas River at	Fort Ri	ley, Ka	E Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1643 WSP 1743 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do. WSP 2145 USGS-L WRD-KS, 1980, vol. 1	Drainage area = 44,870 square miles Downstream from large reservoirs Do. Do. Drainage area = 200 square miles
Sur 958 959 960 961 962 963 964 965 966 967 968 1967 968 1969 061 Sur 1958 1959 1960 1961 1962	mmary or In 14 12 15 16 13 13 40. do. do. do. do. do. do. do. do. do. do	sas River at Creek neanterpretive	Fort Ri	ley, Ka	E: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do. WSP 2145 USGS-L WRD-KS, 1980, vol. 1 7, Kansas E: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1743 WSP 1943	Drainage area = 44,870 square miles Downstream from large reservoirs Do. Do. Drainage area = 200 square miles
Sur 958 959 960 961 962 963 964 965 966 967 1968 9969 068 1969 068 Sur 1958 1959 1960 1961 1962	mmary or In 14 12 15 16 13 16 13 16 13 17 18 17 19 11 16 13 17 18 18 19 11 16 13	sas River at Creek neanterpretive 2 2 6 5	Fort Ri	ley, Ka	: Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1643 WSP 1743 WSP 1943 WSP 1949 SSMR 1960-64 SSMR 1965-69 do. do. do. do. WSP 2145 USGS-L WRD-KS, 1980, vol. 1 7, Kansas : Col.1, Mun.1, Ost. WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943	Drainage area = 44,870 square miles Downstream from large reservoirs Do. Do. Drainage area = 200 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

iatei ear	·	Number of an	alyses		Publication1/ or office file2/	Additional information
eai		d-sediment Particle size	Bed- mater- ial size	Bank-		
	06879900 Big (Prior to 19 Summary or I	66, publishe	d as Nort	h Bran	ch Big Blue River)	Drainage area = 345 square miles
965	3	1			WSP 1963	
.966 .967	16 8	3 7			WSP 1993 WSP 2013	
968	7	3	1		WSP 2095	
969 970	13 10	9 3	2		WSP 2145 WSP 2155	
972	6	6	1		WRD-NE, 1972, part 2	
977			1	2	WRD-NE, 1977; USGS-L	
	0688D500 Big Summary or I					
977			1		WRD-NE, 1977	
	06880800 Wes Summary or I	t Fork Big B nterpretive	lue River Publicati	near	Dorchester, Nebraska : Ost.5	Drainage area = 1,206 square miles
963	5	5	2		WSP 1949	
964	14	7	13		WSP 1956	
965 966	23 17	19 9	11 15		WSP 1963 WSP 1993	
967	19	10	14		WSP 2013	
060	5/				SSMR_1965-69	
	٠. د				do.	
969	do. 1				WSP 2155	
968 969 970 981	do. 1 12	12	12		WSP 2155 WRD-NE, 1981	
969 970	1	····				
969 970	1 12	····		ka		
969 970 981	1 12 Big Blue Rive 6 06881000 Big	er near Cret 6 Blue River	e, Nebras 2 near Cret	ika e, Neb	WRD-NE, 1981 WSP 1963	Drainage area = 2,716 square miles
969 970 981 963	Big Blue Rive 6 06881000 Big Summary or I	er near Cret 6 Blue River nterpretive	e, Nebras 2 near Cret	e, Neb	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1	
969 970 981 963 951 960	Big Blue Rive 6 06881000 Big Summary or It	er near Cret 6 Blue River nterpretive 2 3	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743	
969 970 981 963 951 960 961	Big Blue Rive 6 06881000 Big Summary or In	er near Cret 6 Blue River nterpretive 2 3 4	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : 0st.3, 0st.5, Tas.1 WSP 1198 WSP 1743 WSP 1883	
969 970 981 963 951 960 961 962	Big Blue Rive 6 06881000 Big Summary or It	er near Cret 6 Blue River nterpretive 2 3	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 198 WSP 1743 WSP 1883 WSP 1943	
969 970 981 963 951 960 961 962 965 966	1 12 Big Blue Rive 6 06881000 Big Summary or II 3 4 12 5/ do.	er near Cret 6 Blue River nterpretive 2 3 4	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : 0st.3, 0st.5, Tas.1 WSP 1198 WSP 1743 WSP 1883	
969 970 981 963 951 960 961 962 965 966 967	1 12 Big Blue Rive 6 06881000 Big Summary or Ii 3 4 12 5/ do. do.	er near Cret 6 Blue River nterpretive 2 3 4	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do.	
969 970 981 963 951 960 962 965 966 967 968	1 12 Big Blue Rive 6 06881000 Big Summary or II 3 4 12 5/ do.	er near Cret 6 Blue River nterpretive 2 3 4	e, Nebras 2 near Cret Publicati	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska: Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do.	
969 970 981 963 951 966 967 968 969 973	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 5/ do. do. do.	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2	
969 970 981 963 951 966 967 968 969 973 974	1 12 Big Blue Rive 6 06881000 Big Summary or I 3 4 12 5/ do. do. do. do.	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	e, Neb	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1974, part 2	
969 970 981 963 951 962 965 966 967 968 969 973 974 975	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 5/ do. do. do.	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2	
969 970 981 963 951 960 962 965 966 967 968 969 973 974 975 977	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 8/ 5/ do. do. do. do. 1 2 3 1 3	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1988 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1975 WRD-NE, 1975 WRD-NE, 1975 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977	
969 970 981 963 951 960 962 965 966 967 968 969 973 974 975 977	1 12 Big Blue Rive 6 06881000 Big Summary or In 3 4 12 5/ do. do. do. do.	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 MSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1974, part 2 WRD-NE, 1975 WRD-NE, 1975	
969 970 981 963 951 960 961 962 965 966 967 974 974 976 977 977	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 8/ 5/ do. do. do. do. 1 2 3 1 3 2	er near Cret 6 Blue River nterpretive 2 3 4 8	e, Nebras 2 near Cret Publicati 4 3	ce, Neb	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 MSP 1943 SSMR 1965-69 do. do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1974, part 2 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1977	
969 970 981 963 951 960 961 962 966 967 968 974 975 977 978	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 5/ do. do. do. do. do. 2 3 1 3 2	er near Cret 6 Blue River nterpretive 2 3 4 8 1 2 3 1 3 2 Blue River 4 2	e, Nebras 2 near Cret Publicati 4 3	e, Nebons 3/	WRD-NE, 1981 WSP 1963 raska : 0st.3, 0st.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1975 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 WSP 1883 WSP 1949	
969 970 981 963 951 960 962 965 966 973 974 977 978 963 977	1 12 Big Blue Rive 6 06881000 Big Summary or It 5/ do. do. do. do. do. 2 3 1 3 2	er near Cret 6 Blue River nterpretive 2 3 4 8 1 2 3 1 3 2 Blue River 4 2 3	e, Nebras 2 near Cret Publicati 4 3	e, Neb ons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1974, part 2 WRD-NE, 1975 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1977 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 MSP 1883 MSP 18949 WRD-NE, 1979	
969 970 981 963 951 960 9961 9965 9967 9969 9977 9979 9979 9980	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 5/ do. do. do. do. do. 2 3 1 3 2	er near Cret 6 Blue River nterpretive 2 3 4 8 1 2 3 1 3 2 Blue River 4 2	e, Nebras 2 near Cret Publicati 4 3	ce, Neb	WRD-NE, 1981 WSP 1963 raska : 0st.3, 0st.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 WSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1975 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 WSP 1883 WSP 1949	
969 970 981 963 951 960 962 965 966 967 968 969 973 974 975 977	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 8/ 5/ do. do. do. do. do. 2 3 1 3 2 06881500 Big 8 2 3 3 3	er near Cret 6 Blue River nterpretive 2 3 4 8 1 2 3 1 3 2 Blue River 4 2 3 3 1 1	e, Nebras 2 near Cret Publicati 4 3 1 2 3 1 4 2 at Beatri 3 3 1	ce, Neb	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 MSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 MSP 1883 MSP 1989 WRD-NE, 1979 WRD-NE, 1979 WRD-NE, 1979 WRD-NE, 1980 WRD-NE, 1980 WRD-NE, 1981	
969 970 981 963 951 960 961 965 967 968 977 978 977 978 961 961 961 967 997 997 998 998 998 998	1 12 Big Blue Rive 6 06881000 Big Summary or In 3 4 12 5/ do. do. do. do. do. 2 3 1 3 2 06881500 Big 8 2 3 3 1	Blue River 1 2 3 4 8 1 2 3 1 3 2 Blue River 4 2 3 3 1 1 Blue River nterpretive	e, Nebras 2 near Cret Publicati 4 3 1 2 3 1 4 2 at Beatri 3 3 1	ce, Nebons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 MSP 1883 MSP 1943 SSMR 1965-69 do. do. do. do. MRD-NE, 1974, part 2 WRD-NE, 1975 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 MSP 1989 WRD-NE, 1980 WRD-NE, 1980 WRD-NE, 1981 ebraska Tas.1	Drainage area = 3,900 square miles
969 970 981 963 961 962 965 966 967 977 978 977 978 977 978	1 12 Big Blue Rive 6 06881000 Big Summary or It 3 4 12 8/ 5/ do. do. do. do. do. 2 3 1 3 2 06881500 Big 8 2 3 3 1	er near Cret 6 Blue River nterpretive 2 3 4 8 1 2 3 1 3 2 Blue River 4 2 3 3 1 1	e, Nebras 2 near Cret Publicati 4 3 1 2 3 1 4 2 at Beatri 3 3 1	ce, Nebons 3/	WRD-NE, 1981 WSP 1963 raska : Ost.3, Ost.5, Tas.1 WSP 1198 WSP 1743 WSP 1883 MSP 1943 SSMR 1965-69 do. do. do. WRD-NE, 1973, part 2 WRD-NE, 1976 WRD-NE, 1976 WRD-NE, 1977 WRD-NE, 1978 Draska WSP 1883 MSP 1883 MSP 1989 WRD-NE, 1979 WRD-NE, 1979 WRD-NE, 1979 WRD-NE, 1980 WRD-NE, 1980 WRD-NE, 1981	Drainage area = 3,900 square miles Drainage area = 4,447 square miles

Table 5.-Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	reliered at the Franch Mills	umber of an	alyses	Publication1/ or office file2/	Additional information
		-sediment Particle size	mater- n ial	Bank-	
C. C)6882000 Sig	Blue River	at Barnesi	con, NebraskaContinued	
1963 964 1985 1986 1967 1968	do. do. do. do.	2		WSP 1949, SSMR 1960 SSMR 1960-64 SSMR 1965-69 do. gc. do. do.	1-64
				eweese, Nebraska ons 3/: Ost.3, Tas.1	Drainage area = 979 square miles
1953 1955 1956 1957 1958 1959 1960	<u>8</u> / do. do.	2 10 11 14 14 12 7	3 9 5 5 12 16	WSP 1291 WSP 1451 do. WSP 1521 WSP 1572 WSP 1543 WSP 1743 WSP 1783	
0.6	5883100 Littl	e Blue Rive	r at Angus	s, Nebraska	мандуун күр домин о домун _т он удонуулган тайын түүдүү доруулган байтуулган байтан байтан түүнүн дайын тайын тай
951 952 953	9 7 4	2		WSP 1198 WSP 1251 WSP 1291	
06 301		e Blue Pive	r near Gil	ead, Mebraska WSP 1883	Drainage area = 1,552 square miles
				irbury. Nebraska ns 🏖: Ost.2, Ost.3	Drainage area = 2,350 square miles
.957 (950 .960 (961 .980	40 38 3 5	23 23 3 4 2	11 3	WSP 1521 WSP 1572 WSP 1743 WSP 1883 WRD-NE, 1980	
	ittle Blue Ri ummary or Int	ver near Er erpretive F	dicott, No Publication	ebraska ns 3/: Col.1,	
1951 1952 1953 1955 1955	9 22 15 4 48 38	2 1 12 2 27 32	4 17 4	WSP 1198 WSP 1251 WSP 1291 WSP 1401 WSP 1451 USGS-LN	
06	5884025 LISUI	e slue Rive	er at Holle	enberg, Kansas	Drainage area = 2,752 square miles
1973 1975 1977 1978 1979 1980 1981	1 3 4 3 2 2 2	em (a) ep ep 20 20 (2)	1 5 3 4 3 2 2	WRD-KS, 1973, part WRD-KS, 1975 WRD-NE, 1977 WRD-NE, 1978 WRD-KS, 1979, vol. WRD-KS, 1980, vol. WRD-KS, 1981, WRD-N WRD-KS, 1982	1; WRD-NE, 1979 1; WRD-NE, 1980
(ס ער אחרט 16884200 און 20 ער אחרט	Creek at W	lashington Publication	, Kansas ons ½: Ost.2, Ost.3, Ost	Drainage area = 344 square miles
1961 1976	4	3		WSP 1883 2 USGS-L	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

later		Number of a	nalyses		Publication 1/ or office file 2/	Additional information
/ear		Particle size	Bed- mater- ial size	Bank- mater- ial size	or office fitted	
	06884390 Lii	tle Blue Riv	ver at H	anover,	Kansas	
1957	1				USGS-LN	
1960		tle Blue Riv Interpretive			, Kansas : Ost.2, Ost.3, Ost.	Drainage area = 3,324 square miles 4, Ost.5
1961	do.				do.	
1962 1963	do.				do.	
1964	do. do.				do. do.	
1965	do.				SSMR 1965-69	
1966	do.		1		SMR 1965-69, WSP 299	93
1967 1968	do. do.				SSMR 1965-69 do.	
1969	do.				do.	
1970	7	2			WSP 2155	
1976	5	1		2	WRD-KS, 1976; USGS-L	-
1977 1978	5 6				WRD-KS, 1977 WRD-KS, 1978	
979	3	3	3		WRD-KS, 1979, vol. 1	L
1 9 80	9				WRD-KS, 1980, vol. 1	
1981 1982	10 9	1 2			WRD-KS, 1981 WRD-KS, 1982	
983	5	1			WRD-KS, 1983	
.957 .969	06884700 Big	Blue River	near Bl	ue Rapi	ds, Kansas USGS-LN SSMR 1965-69	Drainage area = 8,342 square miles
	06885500 Bla Summary or I	ck Vermillie Interpretive	on River Publica	near F tions 3	rankfort, Kansas /: Col.1, Ost.2, Ost.	Drainage area = 410 square miles 4, Ost.5
1958	4	4			WSP 1572	
1969 1976	<u>4</u> /	1		2	SSMR 1965-69 WRD-KS, 1976; USGS-L	
9B2	1	i		-	WRD-KS, 1982	-
	Summary or 1	Blue River			ansas /: Col.1, Jor.2, Ost.	Drainage area = 9,100 square miles 3, Tas.1
929	<u>6/</u> 3				HD-238	
930 931	do.12 do.12				do. do.	
.932	do. 9				do.	
943	do.11				USCE-0	
944 945	do.12 do.12				do.	
945	do.12				do. do.	
947	do. 12				do.	
948	10/24 5/	24			USCE-KC, USCE-O	/C USCE O
949 950	ين do.	52 26			SSMR 1949-54, USCE-1	CC, USCE-0
951	do.	8			do.	
952	do.	-			SSMR 1949-54, USCE-0)
953	do.				do.	
954	do. do.				do. SSMR 1955-59	
955	3				USCE-KC	
1955 1956	F. 3					
956 957	<u>5</u> /				SSMR 1955-59	
956	5/ do. do.				SSMR 1955-59 do. do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

later ear	N	umber of a	nalyses		_Publication1/ or office file2/	Additional information
- u i	Suspended		Be d-	Bank-		
	Concen- tration	Particle size	mater- ial	mater- ial	•	
			size	size		
0	6886500 Fanc	y Creek at	Winkler,	Kansas		Drainage area = 174 square miles
971 977	1 1	1			WRD-KS, 1971, part 2 WRD-KS, 1977	
0	6887000 Big	Blue River	near Man	hattan	, Kansas	Drainage area = 9,640 square miles
960	4/				SSMR 1960-64	Downstream from Tuttle Creek Lake
961	<u>5</u> /				do.	00.
962 963	do. do.				do. do.	Do. Do.
964	do.				do.	Do.
965	do.				SSMR 1965-69	Do.
966	do.				do.	Do.
967 968	do. do.				do. do.	Do. Do.
969	do.				WSP 2145, SSMR 1965-69	
975	7				WRD-KS, 1975	Do.
976	10				WRD-KS, 1976	Do.
977	8	1			WRD-KS, 1977	Do.
978 979	9 12	1			WRD-KS, 1978 WRD-KS, 1979, vol. 1	Do. Do.
980	13				WRD-KS, 1980, vol. 1	Do.
981	10				WRD-KS, 1981	Do.
982	5	0			WRD-KS, 1982	Do.
983	8	8	1		WRD-KS, 1983	Do.
В	ig Blue Rive	r at Manha	ttan, Kan	sas		
	9/ 27				WSP 273	
907 908	9/ 27 do. 7				WSP 273 WSP 273	and the second of the second o
908	do. 7 				WSP 273	Drainage area = 55,240 square miles Ost.3, Ost.4, Ost.5, Tas.1
908	do. 7 	terpretive 18 6	Publicat 6 2		WSP 273	
908 0 5 957 958 959	do. 7 16887500 Kans summary or In 23 8/ do.	terpretive 18 6 7	Publicat 6 2 2		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do.
908 0 S 957 958 959 960	do. 7 16887500 Kans fummary or In 23 8/ do. do.	terpretive 18 6 7 14	Publicat 6 2 2 8		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs
908 0 8 957 958 959 960 961	do. 7 16887500 Kans rummary or In 23 8/ do. do. do.	18 6 7 14 24	Publicat 6 2 2 8 8		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs Do.
908 0 8 957 958 959 960 961 962	do. 7 16887500 Kans fummary or In 23 8/ do. do.	terpretive 18 6 7 14	Publicat 6 2 2 8		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs
908 0 5 957 958 959 960 961 962 963 964	do. 7 16887500 Kans fummary or In 23 8/ do. do. do. do. do. do. do.	18 6 7 14 24 16 7	Publicat 6 2 2 8 8 10 12 11		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 WSP 1956	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs Do. Do. Do. Do. Do.
908 0 957 958 959 960 961 962 963 964 965	do. 7 16887500 Kans 10mmary or In 23 8/ do.	18 6 7 14 24 16 7 4	Publicat 6 2 2 8 8 10 12 11		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs Do. Do. Do. Do. Do. Do. Do. Downstream from seven large reservoirs
908 0 957 958 959 960 961 962 963 964 965 966	do. 7 16887500 Kans rummary or In 23 8/ do.	18 6 7 14 24 16 7 4 2	Publicat 6 2 2 8 8 10 12 11 10 4		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1993	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs Do.
908 0 8 957 958 959 960 961 962 963 964 965 966 967	do. 7 16887500 Kans 10mmary or In 23 8/ do.	18 6 7 14 24 16 7 4 2 2 2	Publicat 6 2 2 8 8 10 12 11		WSP 273 2: Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1956 WSP 1958 WSP 1993 WSP 2013 WSP 2095	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Downstream from six large reservoirs Do.
908 0 S 957 958 959 960 961 962 963 964 965 966 967 968 969	do. 7 16887500 Kans fummary or In 23 8/ do.	18 6 7 14 24 16 7 4 2 2 2 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12		WSP 273 7: Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1963 WSP 1993 WSP 2013 WSP 2013 WSP 2015	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do.
908 0 S 957 958 959 960 961 962 963 964 965 966 967 968 969 970	do. 7 16887500 Kans 10mmary or In 23 8/ do.	18 6 7 14 24 16 7 4 2 2 1 1 1 7	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1956 WSP 1956 WSP 1963 WSP 1963 WSP 1993 WSP 2013 WSP 2013 WSP 2015 WSP 2145 WRD-KS, 1970	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do.
908 0 957 958 959 960 961 962 963 964 965 966 967 968 9970 971	do. 7 16887500 Kans Summary or In 23 3/ do.	18 6 7 14 24 16 7 4 2 2 1 1 7 4	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1966 WSP 1956 WSP 1956 WSP 1958 WSP 2013 WSP 2015 WSP 2015 WSP 2145 WRD-KS, 1970 WRD-KS, 1971, part 2	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do.
908 0 S 957 958 9960 961 962 963 964 965 966 967 968 969 971 972 973	do. 7 16887500 Kans 10mmary or In 23 8/ do.	18 6 7 14 24 16 7 4 2 2 1 1 7 4 3 1 3	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1956 WSP 1956 WSP 1963 WSP 1963 WSP 1993 WSP 2013 WSP 2013 WSP 2015 WSP 2145 WRD-KS, 1970	Ost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do.
998 9957 9957 9958 9959 960 961 962 963 964 965 966 967 970 971 973 973 974	do. 7 6887500 Kans summary or In 23 8/ do. do. do. do. do. do. do. do. do. do	terpretive 18 6 7 14 24 16 7 4 22 1 1 7 4 3 1 3 3	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1945 WSP 1956 WSP 1963 WSP 1993 WSP 2013 WSP 2013 WSP 2015 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2	Dost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
9958 0 S 9957 9958 9959 960 9962 9963 9964 9969 9970 9971 9973 9973 9973	do. 7 16887500 Kans Summary or In 23 3/ do.	18 6 7 14 24 16 7 4 2 2 1 1 1 7 4 3 1 3 3 3 3 3	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1983 WSP 1993 WSP 1996 WSP 1956 WSP 1963 WSP 2015 WSP 2015 WSP 2145 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2	Downstream from five large reservoirs Do.
908 0 S 957 958 959 960 961 962 963 964 966 967 968 969 971 972 973 973 974 975 976	do. 7 16887500 Kans summary or In 23 8/ do.	terpretive 18 6 7 14 24 16 7 4 22 1 1 7 4 3 1 3 3	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1963 WSP 2013 WSP 2013 WSP 2013 WSP 2015 WRD-KS, 1970 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1975 WRD-KS, 1975 WRD-KS, 1976	Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
908 0 S 957 958 959 960 961 962 963 964 965 966 967 978 977 978 977 977 977	do. 7 16887500 Kans Summary or In 23 3/ do.	18 6 7 14 24 16 7 4 2 2 1 1 1 7 4 3 1 3 3 3 3 3	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1		WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1983 WSP 1993 WSP 1996 WSP 1956 WSP 1963 WSP 2015 WSP 2015 WSP 2145 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2	Downstream from five large reservoirs Do.
908 0 S 957 958 9959 960 961 962 963 964 966 9970 9971 9972 9973 9774 9975 9976 9977 9978 9979	do. 7 16887500 Kans Summary or In 23 3/ do.	18 6 7 14 24 16 7 4 2 2 1 1 7 4 3 1 3 3 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 1 2	tons 3	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1956 WSP 1956 WSP 1956 WSP 1956 WSP 1958 WSP 2013 WSP 2015 WSP 2015 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1;	Dost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do.
908 0 S 957 958 959 960 962 963 964 966 967 968 9970 971 972 973 974 975 977 977 977 977 978	do. 7 16887500 Kans 10mmary or In 23 8/ do. do. do. do. do. do. do. do	terpretive 18 6 7 14 24 16 7 4 22 1 1 7 4 3 1 3 3 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 1 2	ions 34	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1963 WSP 2013 WSP 2013 WSP 2013 WSP 2014 WRD-KS, 1970 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1; WRD-KS, 1980, vol. 1	Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
908 0 S 957 958 959 960 961 963 964 965 967 968 969 971 972 973 977 978 977 978 977 978 9980	do. 7 16887500 Kans fummary or In 23 8/ do.	terpretive 18 6 7 14 24 16 7 4 2 2 1 1 7 4 3 1 3 3 1 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 2 2 2	ions 34	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1956 WSP 2013 WSP 2013 WSP 2013 WSP 2018 WSP 20145 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1; WRD-KS, 1980, vol. 1 WRD-KS, 1981	Dost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
908 0 S	do. 7 16887500 Kans 10mmary or In 23 8/ do. do. do. do. do. do. do. do	terpretive 18 6 7 14 24 16 7 4 22 1 1 7 4 3 1 3 3 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 1 2	ions 34	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1963 WSP 2013 WSP 2013 WSP 2013 WSP 2014 WRD-KS, 1970 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1; WRD-KS, 1980, vol. 1	Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
908 0 S 957 958 959 960 962 963 964 966 967 968 970 971 973 974 975 977 978 977 978 979 981 982 983	do. 7 16887500 Kans Summary or In 23 8/ do. do. do. do. do. do. do. do. do. do	18 6 7 14 24 16 7 4 2 2 1 1 1 3 3 3 3 1 1 1 1 1 3 1 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 2 2 2 2 2	ions 3/	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1743 WSP 1883 WSP 1949 WSP 1956 WSP 1956 WSP 1958 WSP 2013 WSP 2013 WSP 2013 WSP 2013 WSP 2018 WSP 2145 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1; WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983	Dost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do
908 0 S 957 958 959 960 961 963 964 965 967 968 969 971 972 973 977 978 977 978 979 980 981 982 983 984 985 986 987 987 988 988 988 988 988 988	do. 7 16887500 Kans Summary or In 23 3/ do.	18 6 7 14 24 16 7 4 2 2 1 1 7 7 4 3 3 3 3 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 3 3 1 1 1 3 3 1 1 1 3 3 1 1 1 3 3 1 1 1 3 3 1 1 1 3 3 1 1 1 1 3 3 1 1 1 1 3 3 1 1 1 1 3 3 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 3 3 1 1 1 1 1 1 3 3 1 1 1 1 1 1 1 3 3 1 1 1 1 1 1 1 3 3 1 1 1 1 1 1 1 3 3 1 1 1 1 1 1 1 1 3 3 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 2 2 2 2 2	ions 3/	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 1956 WSP 2013 WSP 2013 WSP 2013 WSP 2015 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1980, vol. 1 WRD-KS, 1980 WRD-KS, 1982 WRD-KS, 1983	Downstream from five large reservoirs Do.
908 0 S 9957 958 9959 960 961 962 963 964 966 967 968 9971 9772 9773 9775 9977 9978 9978 9979 9980 9981 9982 9983	do. 7 16887500 Kans 100 Mary or In 23 8/ do. do. do. do. do. do. do. do. do. do	18 6 7 14 24 16 7 4 22 1 1 7 4 3 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Publicat 6 2 2 8 8 10 12 11 10 4 7 11 12 8 3 1 1 1 2 2 2 2 2 2	ions 3/	WSP 273 : Alb.1, Col.1, Mun.1, WSP 1521 WSP 1572 WSP 1643 WSP 1643 WSP 1883 WSP 1943 WSP 1949 WSP 1956 WSP 1963 WSP 2013 WSP 2013 WSP 2013 WSP 2015 WRD-KS, 1970 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1; WRD-KS, 1981 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983 Kansas : Col.1, Mun.1, Ost.2,	Dost.3, Ost.4, Ost.5, Tas.1 Downstream from five large reservoirs Do. Do. Do. Do. Do. Do. Do. Do. Do. Downstream from seven large reservoirs Do. Downstream from eight large reservoirs Do. Downstream from nine large reservoirs Do.

Water		Number of a	nalyses		Publication1/ or office file2/	Additional information
ear/		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
6888	000 Vermilli	on Creek ne	ar Wameg	o, Kans	asContinued	
1962 1963 1966 1971 1978	<u>8</u> / do. 2	14 3 2	1	2	WSP 1943 WSP 1949 WSP 1993 WRD-KS, 1971, part 2 USGS-L	
0	6888030 Verm	illion Cr e el	c near L	ou i sv i l	le, Kansas	Drainage areas = 297 square miles
.972 .974	1 3	1			WRD-KS, 1972, part 2 WRD-KS, 1974, part 2	
	06888500 Mil Summary or I					Drainage area = 316 square miles
961	2				WSP 1883	
(06889000 Kans Summary or Is	sas River an nterpretive	t Topeka Publica	, Kansa tions ³	s /: Col.1, Ost.2, Ost.5	Drainage area = 56,720 square miles
969	1				WSP 2145	Downstream from large reservoirs
	06889100 Solo Summary or In				as /: Car.1, Ost.4	Drainage area = 2.06 square miles
967 968 969 970 971 972 973 974 975 976 977 978 980	3 8	1 2 2 1 1 tier Creek raterpretive 2 2	near Band Publica	2 2 croft, <u>3</u>	/: Car.1, Ost.4 WSP 2013 WSP 2095	Drainage area ≖ 10.5 square miles
969 970 971 972 973 974 975 976 977 978 979	15 17 13 10 10 11 8 4 6 6 7	1 1 1 1		2 2	WSP 2145, WRD-KS, 1969 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1976 WRD-KS, 1977; USGS-L WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	9
	06889140 Solo Summary or Ir				ansas /: Car.1, Ost.2, Ost.4	Drainage area = 16.9 square miles
967 968 969 970 971 972 973	2 9 18 19 12 12 8 7	2			WSP 2013 WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WSP-KS, 1973, part 2 WRD-KS, 1974, part 2	

 $\textbf{Table 5.--} \textit{Inventory of sediment data for streams in Kansas and adjacent areas through 1983--- \textbf{Continued}\\$

ater ear	N	umber of a	nalyses		Publication1/ or office file2/	Additional information
cai	Suspended-sediment Bed- Bank- Concen- Particle mater- mater- tration size ial ial size size		mater- ial	or office fires		
06	5889140 Sold	ier Creek i	near Sol	dier, K	ansasContinued	
975 976 977 978 979 980	4 3 3 3 3 8	1		2 2	WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977; USGS-L WRD-KS, 1978; USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
	5889160 Sold ummary or In					Drainage area = 49.3 square miles
966 967 968 969 970 971 972 973 974 975 976 977 978 979	10 17 25 14 15 12 12 11 3 2 3 11	3 1 3 2 1	1	2 2	WSP 1993 WSP 2013 WSP 2095 WSP 2145 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1976 WRD-KS, 1977; USGS-L WRD-KS, 1978 USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
06 Su	5889180 Sold ummary or In	ier Creek ı terpretive	near St. Publica	Clere tions 3	Kansas /: Car.1, Ost.4	Drainage area = 80.0 square miles
967 968 969 970 971 972 973 974 975 977 978 979	4 9 20 19 12 12 10 6 1 1 3 6	4 3 5 1		2 2	WSP 2013 WSP 2095 WSP 2145; WRD-KS, 196 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1975 WRD-KS, 1975 WRD-KS, 1977; USGS-L WRD-KS, 1979; vol. 1 WRD-KS, 1980, vol. 1	9
06 Su	889200 Sold ummary or In	ier Creek ı terpretive	near Del Publica	ia, Kan tions $\frac{3}{2}$	sas Car.1, Ost.3	Drainage area = 157 square miles
963 964 965 966 967 968 969 970 972 973 974 975 977 978 979 980	4/ 5/ do. do. do. do. 13 10 1 8 8 3	3 2 3 1 3 3	1	1 1	SSMR 1960-64 do. SSMR 1965-69 WSP 1993, SSMR 1965-6 WSP 2013, SSMR 1965-6 WSP 2095, SSMR 1965-6 WSP 2145, SSMR 1965-6 WSP 2155 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1974, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 USGS-L WRD-KS, 1975 USGS-L WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	9 9
06 Su	5889500 Sold ummary or In	ier Creek terpretive	near Top Publica	eka, Ka tions 3	nsas /: Col.1, Ost.2	Drainage area ≈ 290 square miles
961 966 968	5 1	2	1		WSP 1883 WSP 1993 WSP 2095	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983---Continued

later	N	umber of a	n a lyses	denomination (A)	Publication 1/ or office file 2/	Additional information
ear	Suspended Concen- tration	-sediment Particle size	mater- ial	Bank- mater- ial size	or office files	
C)6889500 Sold	ier Creek r	near Tope	ka, Ka	nsasCortinued	
969 977 978	1 1 5	3			WSP 2145 WRD-KS, 1977 WRD-KS, 1978	
C	06889580 Shur	ganunga Cre	ek at So	uthwes	t 29th Street Topeka,	, Kansas - Drainage area = 14.1 square mile:
979 980	16 41	7 4			WRD-KS, 1979, voi. 1 WRD-KS, 1980, vol. 1	
C	0688 9610 Sout	h Branch Si	nunganung	a Cree	k at Southwest 37th S	Street Topeka, Kansas Drainage area = 1.3
1979 1980	3 35	2			WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. i	
C	06889630 Shur	iç≃nunga Cre	eek at To	peka,	Kansas	Orainage area = 33.5 square miles
1979	1	1			WRD-KS, 1979, vol. 1	
C	06889635 Butc	her Creek	at Kan sa s	Place	Topeka, Kansas	Drainage area = 4.7 square miles
.979 .980	8 42	6 3			WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
C	06889640 Shun	ganunga Cre	eek at So	uthwes	t 15th Street Topeka,	, Kansas Drainage area = 37.8 square mile:
1979 1980	6 41	4 5			WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
(06889690 Deer	Creek at	Southwest	: 6th S	treet Topeka, Kansas	Orainage area = 14.3 square miles
1979	1	1			WRD-KS, 1979, vol. 1	1
1980	18		Organic access All Holosophic Property (New Yorks) of Street	moneyadar i	WRD-KS, 1980, vol. 1	AND PORTUGUES AND RESIDENCE PROCESSOR SERVICES AND
C	0688 9 700 Shun	iganunga Cri	eek at Ri	ce Roa	d Topeka, Kansas	Orainage area = 58.7 square miles
1979 1980	3 96	5	1		WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1	
(06890000 Litt Summary or Ir	le Delaware nterpretive	e River r Publicat	ear Ho	rton, Kansas /: Bev.1	Orainage area = 19.6 square miles
1976 1977 1978	1 62 53	1 7 8	1		WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978	
(06890090 Gras	shopper Cr	eek at Ho	orton,	Kansas	одинавандаров Тора и униципальной подположения подположения в тора подположения в тора подположения в тора в т Подположения в тора
1966			1		WSP 1993	
(06890094 Litt Summary or In	le Grassho nterpretive	pper Cree Publicat	ek near tions 3	Effingham, Kansas /: Bev.1	Drainage area ≈ 22.0 square miles
1976 1977	1 17	1 6			WRD-KS, 1976 WRD-KS, 1977	
	06890096 Litt	tle Grassho	pper Cree	ek at M	lu s cotah, Kansas	Drainage area = 52.0 square miles
1977 1978	24 14	5	1		WRD-KS, 1977 WRO-KS, 1978	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

date: /ear		Nı	umber of a	inalyses		Publication 1/ or office file 2/	Additiona	l information
ear		n-	-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files		
	06890100 Summary o					Kansas ': Bev.1, Ost.3	Drainage area =	431 square miles
.977 .978 .979		2 5 2	2 4	2		WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1		
	06890400 Summary o						Drainage area =	738 square miles
969	4/					SSMR 1965-69		
	06890460 Summary o	Coal r Int	Creek nea	ır Half M Publica	ound, Kations 3	nsas ': Bev.l	Drainage area =	27.0 square miles
.977	1	9	5			WRD-KS, 1977		
	06890500 Summary o	Delaw r Int	ware River terpretive	at Vallo Publica	ey Falls tions 3	, Kansas ': Col.l, Mun.l, Ost.	Drainage area = 3, Tas.1	922 square miles
1907 1908 1949 1950 1951 1952 1953	do. do. do. do.	3				WSP 273 do. SSMR 1949-54, USCE-0 do. do. do. do. do.		
957 958 959 960 966	1	9 0 5 0	5 3	1		WSP 1521 WSP 1572 WSP 1643 WSP 1743 WSP 1993; WRD-KS, 19	66	
	Delaware Summary o	River r Int	at Perry terpretive	, Kansas Publica	tions 3	': Mun.1		
907	9/ 1	.5				WSP 273	Before Perry La	ıke
	06891000 Summary o					nsas ': Ost.2, Ost.4, Ost.		58,460 square miles
			ce, precive					
976 977 978 979 980	11/ do. do. do.	1	71 52 78 91 82 52	42 27 30 46 37 43	1		; USGS-L	om many large reservoirs Do. Do. Do. Do. Do. Do.
976 977 978 979 980	11/ do. do. do.		71 52 78 91 82 52	27 30 46 37 43	1	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	; USGS-L	Do. Do. Do. Do.
976 977 978 979 980 981	11/ do. do. do. do.		71 52 78 91 82 52	27 30 46 37 43	1	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	; USGS-L Drainage area =	Do. Do. Do. Do. Do.
976 977 978 979 980 981	11/ do. do. do. do.	Kansa 19	71 52 78 91 82 52 52 as River a	27 30 46 37 43 at Lawrence	1 ce, Kans	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	; USGS-L Drainage area = Downstream from	Do. Do. Do. Do. Do. 59,841 square miles many large reservoirs
.976 .977 .978 .979 .980 .981	11/ do. do. do. do. do. 06891080	Kansa 19	71 52 78 91 82 52 52 as River a	27 30 46 37 43 at Lawrence	1 ce, Kans	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981	; USGS-L Drainage area = Downstream from	Do. Do. Do. Do. Do. Do. so, Do. bo. so, bo. solution and large reservoirs bo.
976 977 978 979 980 981	11/ do. do. do. do. do. 06891080	Kansa 19 Wakar	71 52 78 91 82 52 52 as River	27 30 46 37 43 at Lawrend 6	1 ce, Kans 2 rusa, Ka	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 Gas WRD-KS, 1977 USGS-L	; USGS-L Drainage area = Downstream from Drainage area =	Do. Do. Do. Do. Do. Do. so, Do. bo. so, bo. solution and large reservoirs bo.
. 969 976 977 1978 1980 981 1977 1966	11/ do. do. do. do. do. 06891080 06891200	Kansa 9 Wakar West	71 52 78 91 82 52 52 as River 39	27 30 46 37 43 at Lawrend 6 - at Waka 1	1 ce, Kans 2 rusa, Ka	WSP 2145; WRD-KS, 19 WRD-KS, 1977 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 sas WRD-KS, 1977 USGS-L ensas WSP 1993 near Lawrence, Kansa	; USGS-L Drainage area = Downstream from Drainage area = s Drainage area	Do. Do. Do. Do. Do. Do. Do. 159,841 square miles many large reservoirs Do. 135 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

later ear		Number of a	nalyses		Publication1/ roffice file2/	Additional information
eai		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
	06891490 Yan	kee Tank Cr	eek near	Lawrence	, Kansas	Drainage area = 3.9 square miles
1969 1970	9 5	6 5			SP 2145 SP 2155	
	06891500 Waka Summary or I					Drainage area = 412 square miles 2, Ost.3, Ost.4, Ost.5
958	5	2		W:	SP 1572	Before Clinton Lake
1959	4			W:	SP 1643	Do.
960	16	5			SP 1743	Do.
961	10	6			SP 1883	Do.
.962 .963	4/9	4			SP 1943 SMR 1960-64	Do. Do.
964	<u>5</u> /			3.	do.	Do.
965	do.			S	SMR 1965-69	Do.
966	do.		1		SP 1993, SSMR 1965-6	
967	do.				SMR 1965-69	Do.
968	do.				do.	Do.
969	do.			,	do.	Do.
969	1			W:	SP 2145 	Do.
	06891850 Str	anger Creek	at East	on, Kansas	i	Drainage area = 216 square miles
978	2			WI	RD-KS, 1978	
				fons $\frac{3}{2}$:	Col.1, Mun.1, Ost.2	Drainage area = 406 square miles 2, Ost.3, Ost.4, Ost.5
957 958 959	Summary or II 12 9 5			:Tons <u>3</u> /: W: W: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643	
957 958 959 960	Summary or In 12 9 5 9	nterpretive 3 2		:Tons <u>3</u> /: W: W: W: U:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L	
957 958 959 960 961	Summary or II 12 9 5	nterpretive 3		:Tons <u>3</u> /: W: W: W: U: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883	
957 958 959 960 961 965	Summary or I 12 9 5 9 13	nterpretive 3 2		:Tons <u>3</u> /: W: W: W: U: W: S:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966	Summary or In 12 9 5 9 13 5 /	nterpretive 3 2	Publicat	:fons <u>3</u> /: W: W: W: U: W: S: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 GGS-L SP 1883 SMR 1965-69	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968	Summary or II 12 9 5 9 13 5/ do. do.	nterpretive 3 2	Publicat	:fons <u>3</u> /: W: W: W: U: W: S: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SMR 1965-69 MR 1965-69 do.	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 969	12 9 5 9 13 <u>5</u> / do. do. do.	sterpretive 3 2 5	Publicat	ions 3/: W: W: W: U: W: S: W: S:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SMR 1965-69 do. do.	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 969	Summary or II 12 9 5 9 13 5/ do. do. do.	nterpretive 3 2	Publicat	ions 3/: W: W: W: U: W: S: W: S:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do.	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 969 976	12 9 5 9 13 <u>5</u> / do. do. do.	sterpretive 3 2 5	Publicat	ions 3/: W: W: W: W: W: S: W: W: W: W: W: W: W: W: W: W: W: W: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SMR 1965-69 do. do. RD-KS, 1976	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 976 977	Summary or II 12 9 5 9 13 5/ do. do. do. 4 4 4	sterpretive 3 2 5	Publicat	ions 3/: W: W: W: W: W: S: W: S: W: W: W: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do.	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 976 977 978 979 980	Summary or II 12 9 5 9 13 5/ do. do. do. do. 4 4 4 6	3 2 5	Publicat	Fions 3/: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1979, vol. 1	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 977 978 979 980 981	Summary or II 12 9 5 9 13 60. do. do. 4 4 6 10 7	3 2 5	Publicat	ions 3/: W: W: W: W: S: W: W: W: W: W: W: W: W: W: W: W: W: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1979, vol. 1 RD-KS, 1980, vol. 1	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 976 977 978 979 980 981 982	Summary or II 12 9 5 9 13 5/ do. do. do. do. 4 4 4 6	3 2 5	Publicat	Fions 3/: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1979, vol. 1	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 968 977 978 979 980 981 982 983	Summary or In 12 9 5 9 13 5/ do.	sas River a	Publicat 1 DeSoto,	Tions 3/: W: W	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SMR 1965-69 do. do. CD-KS, 1976 CD-KS, 1977 CD-KS, 1977 CD-KS, 1978 CD-KS, 1980, vol. 1 CD-KS, 1981 CD-KS, 1981 CD-KS, 1982	e, Ost.3, Ost.4, Ost.5
957 958 959 960 961 965 966 967 977 978 979 981 982 983	Summary or In 12 9 5 9 13 5/ do. do. do. do. do. do. Summary or In 7 7 7 7 11/	3 2 5 1 1 2 1 sas River anterpretive	Publicat 1 DeSoto, Publicat	ions 3/: W: W: W: W: W: W: W: W: W:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1978 RD-KS, 1980, vol. 1 RD-KS, 1981 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5	Prainage area = 59,756 square miles Downstream from many large reservoirs
957 958 959 960 961 965 966 967 978 978 978 979 981 982 983	Summary or In 12 9 5 9 13 do. do. do. do. do. do. Summary or In 11/do.	sas River anterpretive	Publicat 1 DeSoto, Publicat 72 66	Williams 3/:	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SMR 1965-69 do. do. CD-KS, 1976 RD-KS, 1977 RD-KS, 1980, vol. 1 RD-KS, 1981 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do.	Drainage area = 59,756 square miles Downstream from many large reservoirs
957 958 959 960 961 965 966 967 976 978 979 981 982 983	Summary or II 12 9 5 9 13 5/ do. do. do. 4 4 6 10 7 7 7 7 06892350 Kans Summary or Ir 11/ do. do.	sas River atterpretive	Publicat DeSoto, Publicat 72 66 60	Lions 3/: Will Will Will Will Will Will Will Wil	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 GO. do. do. do. AD-KS, 1976 AD-KS, 1978 AD-KS, 1981 AD-KS, 1981 AD-KS, 1982 AD-KS, 1983 Ost.2, Ost.5 AD-KS, 1977 AD-KS, 1983	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do.
957 958 959 960 961 965 966 967 978 977 978 981 982 983	Summary or In 12 9 5 9 13 do. do. do. do. do. do. Summary or In 11/do.	sas River anterpretive	Publicat 1 DeSoto, Publicat 72 66	ions 3/: Will Wi	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1982 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do. RD-KS, 1977 do. RD-KS, 1977 do. RD-KS, 1978 RD-KS, 1978 RD-KS, 1978 RD-KS, 1979 RD-KS, 1979	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do.
957 958 959 960 965 967 968 977 978 980 981 982 983	Summary or In 12 9 5 9 13 5/ do. do. do. 4 4 6 10 7 7 7 7 06892350 Kans Summary or In 11/ do. do. do.	sas River anterpretive 138 133 152 197	DeSoto, Publicat 72 66 60 73	# 1	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 GO. do. do. do. AD-KS, 1976 AD-KS, 1978 AD-KS, 1981 AD-KS, 1981 AD-KS, 1982 AD-KS, 1983 Ost.2, Ost.5 AD-KS, 1977 AD-KS, 1983	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do. USGS-L Do.
957 958 959 960 961 965 966 967 968 977 978 979 980 981 982 983	Summary or In 12 9 5 9 13 5/ do. do. do. do. do. 10 7 7 7 7 7 7 7 7 11/ do.	sas River anterpretive	Publicate 1 DeSoto, Publicate 72 66 60 73 75	ions 3/: Will Wi	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1979, vol. 1 RD-KS, 1981 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do. RD-KS, 1977 do. RD-KS, 1977 do. RD-KS, 1978 RD-KS, 1978 RD-KS, 1978 RD-KS, 1978 RD-KS, 1979, vol. 1; RD-KS, 1979, vol. 1; RD-KS, 1979, vol. 1;	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do. USGS-L Do. Do.
957 958 959 960 965 966 967 978 978 980 981 977 978 983	Summary or II 12 9 5 9 13 60. do. do. do. 4 4 4 66 10 7 7 7 7 06892350 Kans Summary or Ir 11/ do. do. do. do.	sas River anterpretive 1 1 2 1 sas River anterpretive 138 133 152 197 170 124 6	Publicat 1 DeSoto, Publicat 72 66 60 73 75 75 1	Tions 3/: With With With With With With With With	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1980, vol. 1 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do. RD-KS, 1978 RD-KS, 1978 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1978 RD-KS, 1983 ACCORDANCE OF THE RESERVE OF T	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do. USGS-L Do. Do. Do.
957 958 959 960 965 967 968 977 980 978 979 981 976 977 977 981 978 979 981	Summary or II 12 9 5 9 13 60. do. do. do. 4 4 4 66 10 7 7 7 7 06892350 Kans Summary or Ir 11/ do. do. do. do. do. 6	sas River anterpretive 1 1 2 1 sas River anterpretive 138 133 152 197 170 124 6	Publicat 1 DeSoto, Publicat 72 66 60 73 75 75 1	ions 3/: Will Wi	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1978 RD-KS, 1978 RD-KS, 1980, vol. 1 RD-KS, 1982 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do. RD-KS, 1978 RD-KS, 1981 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1983 Cost.2, Ost.5 RD-KS, 1978 RD-KS, 1981 RD-KS, 1988 RD-KS, 1988 RD-KS, 1988 RD-KS, 1988 RD-KS, 1988 RD-KS, 1983 Kansas Ost.3	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do. Do. Do. Do. Do. Do.
957 958 959 960 965 966 967 978 978 980 981 977 978 983	Summary or In 12 9 5 9 13 5/ do. do. do. do. 4 4 6 10 7 7 7 7 06892350 Kans Summary or In 11/ do. do. do. do. do. do. do. do. do.	sas River anterpretive 1 1 2 1 sas River anterpretive 138 133 152 197 170 124 6	Publicat 1 DeSoto, Publicat 72 66 60 73 75 75 1	Kansas ions 3/: With the state of the state	Col.1, Mun.1, Ost.2 SP 1521 SP 1572 SP 1572 SP 1643 SGS-L SP 1883 SMR 1965-69 SP 1993, SSMR 1965-6 MR 1965-69 do. do. RD-KS, 1976 RD-KS, 1977 RD-KS, 1980, vol. 1 RD-KS, 1982 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1977 do. RD-KS, 1978 RD-KS, 1978 RD-KS, 1983 Ost.2, Ost.5 RD-KS, 1978 RD-KS, 1983 ACCORDANCE OF THE RESERVE OF T	Drainage area = 59,756 square miles Downstream from many large reservoirs Do. Do. Do. Do. Do. Do. Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water		Number of a	nalyses		Publication 1/or office file 2/	Additional information		
ear	Suspended-sediment Bed-Bank-Concen-Particle mater-mater-tration size ial ial size size		or office files/					
	5892500 Kans ummary or In				s, Kansas ': Col.1, Tas.1	Drainage area = 59,928 square miles		
929	<u>6</u> / 3				HD-238	Before large reservoirs		
930	do.12				do.	Do.		
.931	do.12				do.	Do.		
.932 .948	do. 9	15			do. USCE-KC , USCE-O	Do. Downstream from one large reservoir		
949	5/ 13	58			SSMR 1949-54, USCE-KC			
950	do.	25	16		do.	Do.		
951	do.	32			do.	Do.		
.952 .953	do. do.					Downstream from two large reservoirs		
954	do.				USCE-KC, SSMR 1949-54 do.	Do. Do.		
955	do.				SSMR 1955-59	Do.		
956	do.				do.	Downstream from four large reservoirs		
957	do.				do.	Do.		
958	do.				do.	Do.		
.959 .960	do. do.				do. SSMR 1960-64	Downstream from five large reservoirs Downstream from six large reservoirs		
961	do.				do.	Do.		
962	do.				do.	Do.		
963	do.				do.	Do.		
964	do.				d0.	Do.		
.965 .966	do. do.				SSMR 1965-69 do.	Do. Do.		
967	do.				do.	Downstream from seven large reservoirs		
968	do.				do.	Do.		
969	do.			_	do.	Downstream from nine large reservoirs		
979				2	USGS-L	Do.		
Si 907	ansas River ummary or II	near Hollic nterpretive	day, Kan Publica	sas tions <u>3</u>	WSP 273	Drainage area = 61,100 square miles Before large reservoirs		
Ka Si 1907 1908 1909	ummary or I	near Hollio nterpretive	day, Kan Publica	sas tions <u>3</u>				
Si 1907 1908 1909	ummary or I 25 36	nterpretive	Publica	tions <u>3</u>	WSP 273 do. do.	Before large reservoirs Do.		
907 908 909	25 36 10	nterpretive	Publica	tions <u>3</u>	WSP 273 do. do.	Before large reservoirs Do. Do.		
907 908 909 00	25 36 10 	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2	Before large reservoirs Do. Do.		
907 908 909 00	25 36 10 6892940 Turk 1 issouri Rive	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i : Mun.1	Before large reservoirs Do. Do. Drainage area = 22.3 square miles		
907 908 909 00 974 Mr Si	25 36 10 5892940 Turk 1 issouri Rive ummary or In	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs		
907 908 909 974 M St 907 908 929	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i : Mun.1	Before large reservoirs Do. Do. Drainage area = 22.3 square miles		
907 908 909 974 M. St 907 908 929 930	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do.12	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do.		
907 908 909 974 M* Si 907 908 929 930 931	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do.		
907 908 909 974 977 907 908 929 930 931 932	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do. 9 6/4	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do.		
907 908 909 974 974 907 908 929 930 931 932 948	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do.12 do.12 do.9	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do.		
907 908 909 974 977 907 908 929 931 932 948 949 950	25 36 10 5892940 Turk 1 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12 do. 9 5/4	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. USCE-0 SSMR 1949-54, USCE-0 do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 907 908 929 930 931 932 948 949 950 951	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do.12 do.12 do.12 do.9 6/4	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
907 908 909 974 974 907 908 929 930 931 948 949 950 951 952	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.9 6/4 5/4	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 907 908 992 930 931 932 948 949 950 951 952 953	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do.12 do.12 do.12 do.9 6/4 do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. do. do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 977 907 908 929 930 931 932 948 950 951 952 953	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.9 6/4 5/4	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. do.	Before large reservoirs Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 907 908 929 930 931 932 948 949 951 952 953 955 955	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.9 6/4 5/4 do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1949-54, USCE-0 SSMR 1949-54, USCE-0	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 907 907 908 929 930 931 948 949 950 951 952 953 954 955 956 957	25 36 10 5892940 Turk 1 issouri Rive ummary or In 6/36 do. 2 9/3 do.12 do.12 do.12 do.9 6/4 do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 907 908 929 931 932 948 950 951 952 953 953 955 957 957	25 36 10 5892940 Turk 1 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12 do. 12 do. 9 5/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. do. do. SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. do.	Before large reservoirs Do. Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 81 907 908 929 931 932 948 949 950 951 952 953 954 955 1955 1956 1958	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.12 do. 9 6/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. do. SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1949-54, USCE-0 SSMR 1955-59 do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
907 908 909 974 907 908 997 908 999 931 932 948 949 951 1952 953 1955 1956 1956 1958 1958	25 36 10 5892940 Turk 1 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12 do. 12 do. 9 5/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. do. do. SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. do.	Before large reservoirs Do. Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 06 974 Mr Si 907 908 992 993 993 993 993 995 995 995 995	25 36 10 5892940 Turk 1 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12 do. 12 do. 9 6/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. SSMR 1960-64 do. do. do.	Before large reservoirs Do. Do. Do. Do. Dointinage area = 22.3 square miles Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		
907 908 909 974 974 907 908 929 931 932 948 949 950 951 952 953 954 955 955 956 957 958 959 959 959 959 959 959 959 959 959	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.12 do. 9 6/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. SSMR 1960-64 do. do. do. do. do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
907 908 909 974 907 908 9974 9908 9929 9931 9932 9931 9932 9948 9949 9951 1952 1954 1955 1956 1956 1958 1959 1960 1961 1963 1964	25 36 10 5892940 Turk 1 issouri Rive ummary or It 6/36 do. 2 9/3 do.12 do.12 do.9 6/4 5/ do. do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. SSMR 1955-59 do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
907 908 909 974 907 908 9974 908 9929 930 931 948 949 951 952 953 951 955 955 955 955 956 957 958 959 950 951 955 955 956 957 958 959 950 951 955 955 956 957 958 959 950 950 950 950 950 950 950	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.12 do. 9 6/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. USCE-0 SSMR 1949-54, USCE-0 do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. SSMR 1960-64 do. do. do. do. do.	Before large reservoirs Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
1907 1908 1909 06 1974 1974 1908 19908 19908 19931 19932 19931 19932 19931 19950 19951 19951 19954 19959 19959 19959 19960 19961 19962 19963 19963 19963 19963 19963 19965 199	25 36 10 5892940 Turk 1 issouri Rive ummary or Ir 6/36 do. 2 9/3 do.12 do.12 do.12 do.12 do. do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. do. SSMR 1949-54, USCE-0 do. do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. SSMR 1960-64 do. do. SSMR 1960-64 do.	Before large reservoirs Do. Do. Do. Do. Drainage area = 22.3 square miles Before large reservoirs Do.		
Si 1907 1908 1909 06	25 36 10 5892940 Turk 1 1 issouri Rive ummary or In 6/36 do. 2 9/3 do. 12 do. 12 do. 12 do. 9 6/4 5/4 do. do. do. do. do. do. do. do. do. do.	cey Creek a	Publica t Kansas s City,	City,	WSP 273 do. do. do. Kansas WRD-KS, 1974, part 2 i: Mun.1 WSP 273 do. HD-238 do. do. do. SSMR 1949-54, USCE-0 do. do. do. SSMR 1949-54, USCE-0 SSMR 1955-59 do. do. do. SSMR 1960-64 do. do. SSMR 1965-69 do. SSMR 1965-69 do.	Before large reservoirs Do. Do. Do. Do. Do. Do. Do. Do		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

year	Number of analyses						Publication 4 or office file2/	Additional information		
	Susp	<u>ende</u> c	i-sedim	ent E	Bed-	Bank-	or orrice tites			
	Conc		Partic size	i	ial	mater-				
			·		size	size				
969	06910800		is des	Cygnes	River	near	Reading, Kansas	Drainage area = 177 square miles		
981		1					WSP 2145 WRD-KS, 1981			
	06911000	Mara	is des	Cygnes	River	at Me	lvern	Drainage area = 351 square miles		
964	<u>5</u> /						SSMR 1960-64	Before Melvern Lake		
965	do.						SSMR 1965-69	Do.		
.966 .967	do. do.				1		WSP 1993, SSMR 1965-69 SSMR 1965-69	Do. Do.		
968	do.						do.	Do.		
969	do.						do.	Do.		
							, Kansas ons <u>3</u> /: Ost.4, Ost.5	Drainage area = 114 square miles		
962	4/						SSMR 1960-64			
1963	<u>5</u> /						do.			
964	do.						do.			
965 966	do. do.						SSMR 1965-69 do.			
967	do.						do.			
968	do.						do.			
969 976	do.	3					do. WRD-KS, 1976			
977		2	1				WRD-KS, 1977			
978		4					WRD-KS, 1978			
979 980		5 4	1				WRD-KS, 1979, vol. 1			
981		8					WRD-KS, 1980, vol. 1 WRD-KS, 1981			
982		7					WRD-KS, 1982			
983		7	1				WRD-KS, 1983			
							ar Quenemo, Kansas 7: Col.1, Jor.2	Drainage area = 322 square miles		
949	<u>5</u> /		19				SSMR 1949-54, USCE-KC,	USCE-O Before Pomona Lake		
950	do.		21				do.	Do.		
.951 .952	do. do.				2		do. SSMR 1949-54, USCE-0	Do. Do.		
953	do.						do.	00.		
954	do.						do.	Do.		
964	do.						SSMR 1960-64	Downstream from Pomona Lake		
965	do. do.						SSMR 1965-69 do.	Do. Do.		
967	do.						do.	Do.		
	06913000	Mara	is des	Cygnes	River	near	Pomona, Kansas	Drainage area = 1,040 square miles		
1966					1		WSP 1993	Downstream from Pomona Lake		
	06913500 Summary	Mara or I	ais des nterpre	Cygnes tive Pu	River ublicat	near دُions	Ottawa, Kansas 12: Ost.2, Ost.4, Ost.5	Drainage area = 1,250 square miles		
1961		4	3		1		WSP 1883	Before Pompna Lake		
					1	1	WSP 1993 USGS-L	Downstream from Pomona Lake Do.		
	06913700	Mide	ile Cre	ek near	Princ	eton,	Kansas	Drainage area = 52.0 square miles		
		1					WRD-KS, 1982			
1976		1								
1966 1976 1982		Pot					tt, Kansas 2: Ost.2 ,Ost.4, Ost.5	Drainage area = 334 square miles		
.976		Pot			ıbl ic at		2: 0st.2 ,0st.4, 0st.5	Drainage area = 334 square miles		
1976		Pot						Drainage area = 334 square miles		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

iater		N	lumber of ar	alyses		Publication 1/ or office file 2/	Additional information
ear	Conc		-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	· · · · · · · · - ·	
	0691400) Pott	awatomie Cr	eek near	Garne	tt, KansasContinued	
1978 1979 1980 1981 1982 1983		10 7 9 6 12 7	1 3 2			WRD-KS, 1978 WRD-KS, 1979, vol. 1 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	
			Bull Creek terpretive			, Kansas /: Col.1, Ost.2, Ost.4	,
1949 1950 1951 1952 1953 1954	4/ 5/ do: do: do:	•	8 9	8		SSMR 1949-54, USCE-KC SSMR 1949-54, USCE-KC SSMR 1949-54, USCE-O do. do. SSMR 1949-54	
	0691597	7 Nort	h Sugar Cre	ek belov	v La Cy	gne Lake, Kansas	Drainage area = 56.67 square miles
981		4		2		WRD-KS, 1981	,
	0691598	3 Nort	h Sugar Cre	ek near	Tradin	g Post, Kansas	Drainage area = 73.0 square miles
979 981		5		1	2	USGS-L WRD-KS, 1981	
	Osage (Marais	des Cygnes) River	at Boi	court, Kansas	Drainage area = 2,700 square miles
907 908		28 . 5				WSP 273 do.	Before large reservoirs Do.
	0691600) Mara	is des Cygr	nes Rive	at Tr	ading Post, Kansas	Drainage area = 2,880 square miles
966				1		WSP 1993	Downstream from Pomona Lake
	0691650 Summary	D Big or Ir	Sugar Creek terpretive	at Fari Publicat	linvill tions 3	e, Kansas ⁄: Ost.4	Drainage area = 198 square miles
.966				1		WSP 1993	
	0691660) Mara	is des Cygr	nes Rive	near	Kansas-Missouri State	Line Drainage area = 3,230 square miles
.961 .980 .981 .982	<i>]/</i> do	3 3	2 2 7			WSP 1883 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1982	Before large reservoirs Downstream from Melvern and Pomona Lake: Do. Do.
	0691700	0 Litt	le Osage Ri	iver at 1	Fulton,	Kansas	Drainage area = 295 square miles
.966 .978 .980 .981 .982	<u>7</u> d	3 44 /	2	1		WSP 1993 WRD-KS, 1978 WRD-KS, 1980, vol. 1 WRD-KS, 1981 WRD-KS, 1982	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

year		Number of a	nalyses		Publication 1/ or office file 2/	Additional information
-	Suspender Concen- tration	d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office fifted	
	06917500 Mari Summary or I				, Kansas ': Col.1, Jor.2, Ost	Drainage area = 408 square miles .2, Ost.4
1907	9/ 21				WSP 273	
1908 1949	do.12	18			do. SSMR 1949-54, USCE-1	CC. USCE=0
1950	<u>5</u> /	9	4		do.	0302-0
1951	do.				SSMR 1949-54, USCE-()
1952 1953	do. do.				do.	
1954	₫%.				do.	
1959 1961	1 4	2			USGS-L WSP 1883	
1966	•	-	1		do.	
	385800098291	500 Saline	River be	low Wil:	son Dam, Kansas	Drainage area = 1,917 square miles
1965	7/				SSMR 1965-69	Downstream from Wilson Lake
1966	do.				qo.	Do.
1967	do.				do.	Do.
1968 1969	do. do.				do. do.	Do. Do.
1966	393615101230	7 North For	k Beaver 1	Creek r	ear Goodland, Kansas WSP 1993	i
	3838581013220	O Ladder Cre	ek near	Selkir	, Kansas	
	3838581013220) Ladder Cre	eek near 1	Selkir	, Kansas WSP 1993	
1966	3838581013220		1		WSP 1993	
1966			1		WSP 1993	
1966	3833461010452	2 Ladder Cre	1 eek near	Modoc,	WSP 1993 Kansas	
1966	3833461010452	2 Ladder Cre	1 eek near	Modoc,	WSP 1993 Kansas WSP 1993	
1966 1966	3833461010452	2 Ladder Cre 7 Smoky Hil	1 River	Modoc,	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993	
1966 1966	383346101045 <i>2</i> 385530101281	2 Ladder Cre 7 Smoky Hil	1 River	Modoc,	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993	
1966 1966 1966	383346101045 <i>2</i> 385530101281 <i>2</i> 390221100224 <i>2</i>	2 Ladder Cre 7 Smoky Hil [*] L Big Creek	1 River 1 near Pa	Modoc, near Wal	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993	
1966 1966 1966	383346101045 <i>2</i> 385530101281 <i>2</i> 390221100224 <i>2</i>	2 Ladder Cre 7 Smoky Hil [*] L Big Creek	1 River 1 near Pa	Modoc, near Wal	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as	
1966 1966 1966	383346101045 <i>2</i> 385530101281 <i>2</i> 390221100224 <i>2</i>	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South For	1 River 1 I near Pau 1 Saline 1	Modoc, near Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 Hear Monument, Kansas WSP 1993	
1966 1966 1966	3833461010452 3855301012812 3902211002242 3909201010352	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South For	1 River 1 I near Pau 1 Saline 1	Modoc, near Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 Hear Monument, Kansas WSP 1993	
1966 1966 1966 1966	3833461010452 3855301012812 3902211002242 3909201010352	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Fork 3 Saline Riv	1 River 1 1 near Pai	Modoc, mear Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 mear Monument, Kansas WSP 1993 Kansas	
1966 1966 1966 1966	3833461010452 3855301012812 3902211002242 3909201010352	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Fork 3 Saline Riv	1 River 1 1 near Par 1 1 C Saline 1 1 C Solomore	Modoc, mear Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 Mear Monument, Kansas WSP 1993 Kansas WSP 1993 near Rexford, Kansas	
1966 1966 1966 1966	3833461010452 3855301012812 3902211002241 3909201010352 3906410993248	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Form 3 Saline Riv	l River 1 near Pai 1 C Saline 1 c Solomoi 1 1 1 1 1 1 1 1 1	Modoc, near Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 mear Monument, Kansas WSP 1993 Kansas WSP 1993 near Rexford, Kansas WSP 1993	
1966 1966 1966 1966 1966	3833461010452 3855301012812 3902211002241 3909201010352 3906410993248	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Form 3 Saline Riv	1 River 1 1 1 1 1 1 1 1 1	Modoc, near Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 MEAR Monument, Kansas WSP 1993 Kansas WSP 1993 near Rexford, Kansas WSP 1993 near Edmond, Kansas	
1966 1966 1966 1966	3833461010452 3855301012812 3902211002241 3909201010352 3906410993248	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Form 3 Saline Riv	l River 1 near Pai 1 C Saline 1 c Solomoi 1 1 1 1 1 1 1 1 1	Modoc, near Wal rk, Kans River r	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 mear Monument, Kansas WSP 1993 Kansas WSP 1993 near Rexford, Kansas WSP 1993	
1966 1966 1966 1966	3833461010452 3855301012812 3902211002241 3909201010352 3906410993248	2 Ladder Cre 7 Smoky Hill L Big Creek 7 South Forb 3 Saline Riv	1 Peek near 1 Peek near 1 River 1 River 1 Common 1 Common 1 Common 1 Common 1	Modoc, near Wal rk, Kans River r Palco,	WSP 1993 Kansas WSP 1993 lace, Kansas WSP 1993 as WSP 1993 Mear Monument, Kansas WSP 1993 Kansas WSP 1993 near Rexford, Kansas WSP 1993 near Edmond, Kansas WSP 1993	

Water	N.	umber of an	alyses			lication1/	Additional information
year 	Suspended Concen- tration		Bed- mater- ial size	Bank- mater- ial size	or o	ffice file2/	
39	915251010354	South Fork	Solomo	n River	near	Mingo, Kansas	
1966			1		WSP	1993	
39	921271001123	South Fork	Solomo	n River	near	Studley, Kansas	
1966			1		WSP	1993	
39	950570963953	Big Blue R	liver at	Marysv	ille,	Kansas	
1966			1	······································	WSP	1993	·
39	931470960455	Vermillion	Creek	near Ha	ensv	ille, Kansas	
1966		·	1		WSP	1993	
39	929090950759	Stranger (reek at	Hawtho	rne,	Kansas	
1966			1		WSP	1993	
38	839340955633	Salt Creek	near 0	sage Ci	ty, K	ansas	
1966			1		WSP	1993	
38	845370954141	Hundred an	nd Ten M	ile Cre	ek ne	ar Scranton, Kansas	
1966			1		WSP	1993	
31	813210950057	South Fork	Sugar	Creek n	ear (enterville, Kansas	
1966			1		WSP	1993	
31	801040950256	Little Osa	ige Rive	r near	Bayar	d, Kansas	
1966			1		WSP	1993	
3	750320945851	Marmaton R	iver at	Uniont	own,	Kansas	
1966			1		WSP	1993	
3	800060945246	00 Little ()sage Ri	ver nea	r Map	leton, Kansas Dr	ainage area = 204 square miles
1980 1981	2	1	2			KS, 1980, vol. 1 KS, 1981	
							
3: 1981	818070943824 12	00 North Su 1	ıgar Cre 2	ek trib	-	2, site A below La Dr KS, 1981	Cygne Lake, Kansas ainage area = 1.91 square miles
1982	7					KS, 1982	
38	185609440380	0 North Sug	gar Cree	k tribu	tary	3, site A below La C	ygne Lake, Kansas
1981 1982	12 8	1	2			KS, 1981 KS, 1982	
38 1981	191609439120 5	0 North Sug 2	gar Cree 2	k, 2 mi		elow La Cygne Lake, KS, 1981	Kansas
					·	-	
				k tribu			e, Kansas ainage area ≖ 2.06 square miles
1981 1982	13 6	6	3			KS, 1981 KS, 1982	

Water		Number of a	nalyses	Publication1/ or office file2/	Additional information
year	Suspende Concen- tration	d-sediment Particle size	Bed- Bank- mater- mater ial ial size size		
3	826510944745	00 Marais d	es Cygnes Rive	r near Fontana, Kans	as Drainage area = 2,600 square miles
1980 1981	3 1			WRD-KS, 1980, vol. WRD-KS, 1981	1 Downstream from Melvern and Pomona Lakes Do.
			a River 4 mile Publications	s west of Auburn, Ka 3/: Bev.1	insas
1979 1980	5 13			WRD-KS, 1979, vol. WRD-KS, 1980, vol.	
	385351095542 Summary or I	900 Wakarus nterpretive	a River 5 mile Publications	s west of Auburn, Ka 3/: Bev.1	nsas
1978 1979 1980	1 3 15	1		WRD-KS 1978 WRD-KS, 1979, vol. WRD-KS, 1980, vol.	
			Creek tributa Publications	ry 4 miles northeast 3/: Bev.1	of Auburn, Kansas
1978 1980	1 1	1	-	WRD-KS, 1978 WRD-KS, 1980, vol.	1
			Creek tributa Publications	ry 5 miles northeast 3/: Bev.1	of Auburn, Kansas
1978 1979 1980	1 5 7	1		WRD-KS, 1978 WRD-KS, 1979, vol. WRD-KS, 1980, vol.	
	390000095460	200 Tributa	ry to Shunganu	nga Creek Southwest	37th Street Topeka, Kansas
1980	1			WRD-KS, 1980, vol.	. 1
	390031095424	700 South B	ranch Shunganu	nga Creek at Southwe	est 29th Street Topeka, Kansas
1979	3	3		WRD-KS, 1979, vol.	1
	390053095432	800 Tributa	ry to Shunganu	nga Creek at Southwe	st 29th Street Topeka,Kansas
1979	1			WRD-KS, 1979, vol.	1
	390127095414	800 Shungan	unga Creek at	Washburn Street Tope	eka, Kansas
1980	1		1	WRD-KS, 1980, vol.	. 1
	395551095471 Summary or I	600 Pony Cr nterpretive	eek at Sabetha Publications	Kansas 3/: Bev.1	
1980	18	4	1	WRD-KS, 1980, vol.	. 1
	395710095460 Summary or I	800 Pony Cr nterpretive	eek near Sabet Publications	ha, Kansas 3/: Bev.1	
1980	15	1	1	WRD-KS, 1980, vol.	. 1
	395756095413 Summary or I	400 Pony Cr nterpretive	eek near Morri Publications	11, Kansas 3/: Bev.1	
1980	8		1	WRD-KS, 1980, vol.	. 1
			eek near Reserv		
1980	8	2	2	WRD-KS, 1980, vol.	. 1

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	·	Number of a	nalyses		Publicat or office		Additiona	al information
yeui		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		. , , , , , , , , , , , , , , , , , , ,		
	07137500 Ark Summary or i	ansas River nterpretive	near Co publica	olidge tions <u>3</u>	Kansas ': Alb.1,	Col.1, Ost.1		25,410 square miles
1958	1	1	_		WSP 1944	Downstream		Reservoir and diversions
1961 1962	4 3	1	3 3		do. do.		Do. Do.	
1962	•	•	1		WSP 1950		Do.	
1963	2		2		do.		Do.	
1964 1965	2 6	2	2 6		WSP 1957 WSP 1964		Do. Do.	
1966	3	1	3		WSP 1994		Do.	•
1967	6 5	2	6		WSP 2014		Do.	
1975 1976	17				USGS-L do.		Do. Do.	
1977	15	3			WRD-KS,		Do.	•
1978 1979	9 13	1 2	1		WRD-KS,	1978 1979, vol. 2	Do. Do.	
1980	24	ć.			WRD-KS,	1980, vol. 2	Do.	
1981	14	1			WRD-KS,		Do.	
1982 1983	1 4	2 4	1		WRD-KS,		Do. Do.	
	Arkansas Riv	er at Cooli	dge, Kan	sas				
1950	45				USCE-A	Downstream		Reservoir and diversions
1951 1952	62 72				do. do.		Do. Do.	
1953	26				do.		Do.	
1 93 9	07138000 Ark Summary or i					0st.1	Before John Mari	25,763 square miles
194D	7				do.		Do.	
1941 1958	6 1				do. WSP 1944	Downstream	Do. from John Martin	Reservoir and diversions
1961	5	4	2		do.		Do.	•
1962 1963	2 3	1	1		do. WSP 2096		Do. Do.	
1964	•	-	2		WSP 1957		Do	
1965	6	2	6		WSP 1964		Do.	
1966 1967	3 6	1 2	3 6		WSP 1994 WSP 2014		Do. Do.	
1968	12	1	12		WSP 2096		Do.	•
1969	14 10	3	12		WSP 2146	1071 namt 2	00.	
1971 1972	15	2	2			1971, part 2 1972, part 2	Do.	
1973	20				WRD-KS,	1973, part 2	Do.	•
1974 1975	21 22	1	2 2		WRD-KS,	1974, part 2 1975	Do. Do.	
1976	14	i	ī		WRD-KS,		Do.	
1977	16	1	2		WRD-KS,		Do.	
1978 1979	9 4				WRD-KS, WRD-KS.	1979, vol. 2	Do. Do.	
1980	13				WRD-KS,	1980, vol. 2	Do.	•
1981 1982	8 1	1	1		WRD-KS, WRD-KS,		Do. Do.	
1983	2	1	1		WRD-KS,		Do.	
	07138020 Ark Summary or i						Drainage area =	26,028 square miles
	1	1			WRD-KS,	1979, vol. 2	Downstream from diversi	John Martin Reservoir an Ions
1979	•				WRD-KS, WRD-KS,	1980, vol. 2 1981	Do. Do.	•
1979 1980 1981	1							
1980		at Eastern	Canal Di	version	near Lak	in, Kansas		
1980	1	at Eastern	Canal Di	version	near Lak USBR-D	in, Kansas	The second secon	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	<u> </u>	iumber of a	nalyses	Publication 1/ or office file 2/	Additional information	
year	Concen- Particle mater- mat tration size ial ial		mater- mate	- !r-		
	07138065 Arka	nsas River	at Lakin, Ka	nsas	Drainage area = 27,838 square miles	
1982	1			WRD-KS, 1982	Downstream from John Martin Reservoir and diversions	
	07138070 Arka	nsas River	near Deerfie	ld, Kansas	Drainage area = 25,860 square miles	
1907 1908	<u>9</u> / 22 do. 4			WSP 273 do.	Before John Martin Reservoir Do.	
		e Woman Cr	eek Tributary	near Selkirk, Kansas	Drainage area = 38.0 square miles	
1977	2			WRD-KS, 1977		
	07138650 Whit Summary or in				Drainage area = 750 square miles	
1966 1967	2 2	2 2		WSP 2014 do.		
1971 1973	1 1		1	WRD-KS, 1971, part WRD-KS, 1973, part		
1974 1977	5 4	1 1	1 1	WRD-KS, 1974, part WRD-KS, 1977		
1978 1979 1980	2	-	2 16	WRD-KS, 1978 USGS-L do.		
	07138700 Whit	e Woman Cr	eek near Modo	c, Kansas		
1964	3	3		WSP 1957		
1965 1967	5 2	4 2		WSP 1964 WSP 2096		
1968 1969	2	1		do. WSP 2146		
	07139000 Arka	nsas River	at Garden Ci	ty, Kansas	Drainage area = 27,071 square miles	
1939	1			USBR-D do.	Before John Martin Reservoir Do.	
IUAN				do.		
1941	2 4				DO.	
1941 1958 1961	4 1 4		2	WSP 1944 Downstre do.	am from John Martin Reservoir and diversions Do.	
1941 1958 1961 1962	4 1 4 2		2	WSP 1944 Downstre do. do.	am from John Martin Reservoir and diversions	
1941 1958 1961 1962 1963 1964	4 1 4 2 2 2	2	2 2 2	WSP 1944 Downstre do. do. WSP 1950 WSP 1957	am from John Martin Reservoir and diversions Do. Do. Do. Do.	
1941 1958 1961 1962 1963 1964 1965	4 1 4 2 2 2 2 6 3	2	2 2 2 6 3	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 1994	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do.	
1941 1958 1961 1962 1963 1964 1965 1966	4 1 4 2 2 2 6	2	2 2 2 6	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do.	
1958 1961 1962 1963 1964 1965 1966 1967 1968	4 1 4 2 2 2 2 6 3 7 11	1 nsas River	2 2 2 6 3 7 11	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2096	am from John Martin Reservoir and diversions Do.	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968	4 1 4 2 2 2 2 6 6 3 7 11 07139500 Arka Summary or in	1 nsas River terpretive	2 2 6 3 7 11 at Dodge Cit publications	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2014 WSP 2096 y, Kansas 3/: Alb.1, Ost.1, Ost. WSP 1944 Downstr	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968	4 1 4 2 2 2 2 6 3 7 11 07139500 Arka Summary or in	1 nsas River terpretive	2 2 2 6 3 7 11	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096 y_ Kansas 3/: Alb.1, Ost.1, Ost WSP 1944 Downstr do. WSP 1944, WSP 209	am from John Martin Reservoir and diversions Do.	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968	4 1 4 2 2 2 2 6 3 7 11 07139500 Arka Summary or in	nsas River terpretive 1 1	2 2 6 3 7 11 at Dodge Cit publications	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2096 y, Kansas J.: Alb.i, Ost.l, Ost WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1944, WSP 209	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968 1958 1961 1962 1963 1964 1965	4 1 4 2 2 2 2 6 3 7 11 07139500 Arka Summary or in 1 5 4 3 2 10	nsas River terpretive 1 1 1 2	2 2 2 6 3 7 11 at Dodge Cit publications 2	WSP 1944 Downstre do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096 72 Kansas 3/: Alb.1, Ost.1, Ost WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1950 WSP 1957 WSP 1964	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968 1958 1961 1962 1963 1964	4 1 4 2 2 2 2 6 6 3 7 11 07139500 Arka Summary or in 1 5 4 3 2	nsas River terpretive	2 2 6 3 7 11 at Dodge Cit publications 2	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096 y, Kansas 3/: Alb.1, Ost.1, Ost WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1950 WSP 1957	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968 1968 1961 1963 1964 1965 1966 1967 1968	4 1 4 2 2 2 2 6 6 3 7 11 07139500 Arka Summary or in 1 5 4 3 2 10 4 6 6 11	nsas River terpretive 1 1 1 2 1 2 1	2 2 6 3 7 11 at Dodge Cit publications 2 2 8 4 5	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2096 WSP 2096 WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2096	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1961 1962 1963 1964 1965 1966 1967 1968 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970	4 1 4 2 2 2 2 6 3 3 7 11 07139500 Arka Summary or in 1 5 4 3 2 10 4 6 11 13 12	nsas River terpretive	2 2 2 6 3 7 11 at Dodge Cit publications 2 2 8 4 5	WSP 1944 Downstre do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1962 1963 1964 1965 1966 1967 1968 1968 1963 1964 1965 1963 1964 1965 1967 1968 1967 1969 1970	4 1 4 2 2 2 2 6 3 7 11 07139500 Arka Summary or in 1 5 4 3 2 10 4 6 11 13	nsas River terpretive 1 1 1 2 1 1 2 1 1 2 1 1 2	2 2 6 3 7 11 at Dodge Cit publications 2 2 8 4 5 11 2	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2096 WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1957 WSP 1957 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2016 WSP 2016 WSP 2016 WSP 2156 WRD-KS, 1971, par	am from John Martin Reservoir and diversions Do. Do. Do. Do. Do. Do. Do. Do	
1941 1958 1962 1963 1964 1965 1965 1966 1967 1968 1961 1962 1963 1964 1964 1969 1970 1971 1972	4 1 4 2 2 2 2 6 6 3 7 11 07139500 Arka Summary or in 1 5 4 3 2 10 4 6 11 13 12 11	nsas River terpretive 1 1 1 2 1 1 2 1 1 2 1 1 2	2 2 2 6 3 7 11 at Dodge Cit publications 2 2 8 4 5 11 2 2 2	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096 Y3 Kansas 3/: Alb.1, Ost.1, Ost WSP 1944 Downstr do. WSP 1950 WSP 1957 WSP 1957 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2014 WSP 2014 WSP 2016 WSP 2156 WRD-KS, 1971, par WRD-KS, 1972, par WRD-KS, 1973, par	am from John Martin Reservoir and diversions Do.	
1941 1958 1962 1963 1964 1965 1966 1967 1968 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1971	07139500 Arka Summary or in 15 4 3 2 10 4 6 11 13 12	nsas River terpretive 1 1 1 2 1 1 2 1 1 2 1 1 2	2 2 6 3 7 11 at Dodge Cit publications 2 2 8 4 5	WSP 1944 Downstre do. do. WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2096 WSP 1944 Downstr do. WSP 1944, WSP 209 WSP 1957 WSP 1957 WSP 1964 WSP 1957 WSP 1964 WSP 2014 WSP 2014 WSP 2096 WSP 2156 WRD-KS, 1971, par WRD-KS, 1972, par	am from John Martin Reservoir and diversions Do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year		N	umber of a	nalyses		Publication 1/ or office file 2/	Additional information		
year	Suspended-sediment Concen- Particle tration size		Particle	Bed- mater- ial size	Bank- mater- ial size	or office files			
	07139500	Arka	nsas River	at Dodg	e City,	KansasContinued			
1978		1				WRD-KS, 1978	Downstream from John Martin Reservoir and diversions		
1979 1980 1981		2 3 1				WRD-KS, 1979, vol. WRD-KS, 1980, vol. WRD-KS, 1981			
	07139700	• .a	nsas River	tributa	ry near	Dodge City, Kansas	Drainage area = 8.66 square miles		
1968 1971 1977		1 1 1				WSP 2096 WRD-KS, 1971, part 2 WRD-KS, 1977			
	07139800	Mu1 b	erry Creek	near Do	dge Cit	y, Kansas	Drainage area = 73.8 square miles		
1971 1975 1976 1977 1978 1979		2 3 1 1 1	1			WRD-KS, 1971, part 2 USGS-L do. WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2			
1980 1981		3	2		12	USGS-L WRD-KS, 1981			
	07140000 Summary o	Arka r in	nsas River terpretive	near Ki publica	nsley, tions 3	Kansas /: Alb.1, Blu.1, Col.1	Drainage area = 31,066 square miles 1, Ost.1, Ost.2		
1958		1				WSP 1744, Blu.1	Downstream from John Martin Reservoir and diversions		
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	8/ do. do. do. do. do. do.	6	15 5 3 4 1 2 2 3	4 13 13 13 9 6 4 10 11		do. WSP 1884, Blu.1 WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2014 WSP 2096, Blu.1 WSP 2146 WSP 2156	Do. Do. Do. Do. Do. Do. Do. Do.		
1970 1971 1972 1973 1974 1975 1976 1977	1	3 1 7 3	4	1 1		WRD-KS, 1971, part 2 WRD-KS, 1972, part 2; WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975; Blu-1 WRD-KS, 1976; Blu-1 WRD-KS, 1977; Blu-1 WRD-KS, 1978; Blu-1	Do. Do. Do. Do. Do. Do. Do. Do.		
1979 1980 1981 1982 1983		4 6 5 1 7	1	1		WRD-KS, 1979, vol. 2; WRD-KS, 1980, vol. 2; WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	Blu.1 Do.		
	07140300	Whit	e Woman Cr	eek near	Bellef	ont, Kansas	Drainage area = 14.0 square miles		
1971 1977		1 1				WRD-KS, 1971, part 2 WRD-KS, 1977			
	07140600	Pawn	ee River t	ributary	near K	alvesta, Kansas	Drainage area = 6.89 square miles		
1967 1970 1973 1977		1 2 1				WSP 2014 WSP 2156 WRD-KS, 1973, part 2 WRD-KS, 1977			

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water		Number of a	nalyses	_ Publication 1/ or office file 2/	Additional information	
year	Suspended-sediment Concen- Particle tration size		Bed- Bank- mater- mater ial ial size size			
			near Ness Cit publications		miles	
1967 1968	11 5	9 4		WSP 2014 WSP 2096		
1969	3	•		WSP 2146		
1970	1 2	1		WSP 2156 WRD-KS, 1971, part 2		
1971 1972	1	1		WRD-KS, 1972, part 2		
1973 1975	3 5			WRD-KS, 1973, part 2 USGS-L		
1977	3			WRD-KS, 1977		
1978 1979	3 1			WRD-KS, 1978 WRD-KS, 1979, vol. 2		
1980	2			WRD-KS, 1980, vol. 2		
07	140850 Paw	nee River n	ear Burdett, k	ansas	Drainage area = 1,091 square miles	
1982	1 2	1		WRD-KS, 1982		
1983		<u> </u>		WRD-KS, 1983		
07 Su	141200 Paw mmary or i	nee River n nterpretive	ear Larned, Ka publications	nsas 3/: Col.1, Jor.2, Ost.:	Drainage area = 2,148 square miles 1, Ost.2, Ost.4	
958	3			USGS-L		
1959 1960	2 6	2		do. WSP 1744		
1961	8	2		WSP 1944		
962 .963	7 23	2		do.		
964	12	4 5		WSP 1950, WSP 2096 WSP 1957		
965	9 9	3	1	WSP 1964		
.966 .967	6	5	1	WSP 1994 WSP 2014		
968	4 1	3 1		WSP 2096		
1969 1971	3	1		WSP 2146 WRD-KS, 1971, part 2		
1972 1973	2 7	2		WRD-KS, 1972, part 2		
974	í	1		WRD-KS, 1973, part 2 WRD-KS, 1974, part 2		
1975 1976	6 6	2 3		WRD-KS, 1975		
1977	4	3		WRD-KS, 1976 WRD-KS, 1977		
97B	2	2		WRD-KS, 1978		
.979 .980	6 3	2 1		WRD-KS, 1979, vol. 2 WRD-KS, 1980, vol. 2		
		1		WRD-KS, 1981		
.981	1					
.981 .982	1 2			WRD-KS, 1982 WRD-KS, 1983		
.981 .982 .983	1 2 	ansas River	at Great Bend	WRD-KS, 1983	Drainage area = 34,356 square miles	
1981 1982 1983 	1 2 141300 Ark mmary or i	ansas River	at Great Bend publications	WRD-KS, 1983 13 Kansas 2 : Alb.1, Ost.1, Ost.4		
1981 1982 1983 07 Su 1907	1 2 141300 Ark mmary or i 9/ 28 do. 5	ansas River	at Great Bend publications	WRD-KS, 1983		
.1981 .1982 .1983 	1 2 141300 Ark mmary or i 9/ 28 do. 5 3	ansas River	at Great Bend publications	WRD-KS, 1983 1. Kansas 2/: Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T		
.981 .982 .983 07 Su .907 .908 .944	1 2 141300 Ark mmary or i 9/ 28 do. 5	ansas River	at Great Bend publications	WRD-KS, 1983 1, Kansas 3/: Alb.1, Ost.1, Ost.4 WSP 273 do.		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4	ansas River nterpretive	publications	WRD-KS, 1983 1. Kansas 2. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do.		
.981 .982 .983 .07 .Su .907 .908 .944 .1945 .1946 .1949 .1957	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6	ansas River	at Great Bend publications	WRD-KS, 1983 1. Kansas 2. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1959	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12	ansas River nterpretive 3 9 2	publications 2 3 2	WRD-KS, 1983 13 Kansas 2 : Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573 do. WSP 1644, WSP 1744		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1958	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8	ansas River nterpretive 3 9 2 3	publications 2 3 2 3 2	WRD-KS, 1983 13 Kansas 2 : Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1744		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1959 1960 1961	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8 12 12	ansas River nterpretive 3 9 2 3 3	2 3 2 3 6 6	WRD-KS, 1983 1. Kansas 2. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1884 WSP 1884 WSP 1944		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1959 1960 1961 1962	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8 12 12 12 13	ansas River nterpretive 3 9 2 3 3	2 3 2 3 6 6 6 3 3	WRD-KS, 1983 13 Kansas 3 : Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1744 WSP 1884 WSP 1944 WSP 1950		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1960 1961 1962 1963 1964 1964	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8 12 12 13 15 13	ansas River nterpretive 3 9 2 3 3 3 3	2 3 2 3 6 6 6 3 3 5 4	WRD-KS, 1983 1. Kansas 2. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1884 WSP 1944 WSP 1950 WSP 1957 WSP 1957 WSP 1964		
1981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1957 1958 1959 1961 1962 1963 1962 1963 1964	1 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8 12 13 15 13 12	ansas River nterpretive 3 9 2 3 3 3 4 1	2 3 2 3 6 6 6 3 5 4 6 6	WRD-KS, 1983 J. Kansas J. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1884 WSP 1984 WSP 1944 WSP 1950 WSP 1957 WSP 1964 WSP 1994		
.981 1982 1983 07 Su 1907 1908 1944 1945 1946 1949 1958 1958 1958 1960 1961 1962 1963 1964 1966 1966 1967	1 2 2 141300 Ark mmary or i 9/ 28 do. 5 3 12 6 4 2 17 12 8 12 12 13 15 13 12 10 11	ansas River nterpretive 3 9 2 3 3 3 4 1 2	2 3 2 3 6 6 6 3 5 4 6 4	WRD-KS, 1983 X Kansas X: Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1744 WSP 1944 WSP 1950 WSP 1957 WSP 1957 WSP 1964 WSP 1994 WSP 2014 WSP 2014 WSP 2014		
981 982 983 07 Su 907 908 944 945 946 949 957 958 959 960 961 962 963 964 965 966	1 2 141300 Ark mmary or i 9/28 do. 5 3 12 6 4 2 17 12 8 12 12 13 15 13 12 10	ansas River nterpretive 3 9 2 3 3 3 4 1	2 3 2 3 6 6 6 3 5 4 6	WRD-KS, 1983 1. Kansas 2. Alb.1, Ost.1, Ost.4 WSP 273 do. USCE-T do. do. WSP 1573 do. WSP 1644, WSP 1744 WSP 1744 WSP 1884 WSP 1884 WSP 1950 WSP 1950 WSP 1950 WSP 1950 WSP 1957 WSP 1964 WSP 1994 WSP 2014		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water		Number of a	nalyses		Publication 1/ or office file 2/	Additional information	
year		d <u>-sediment</u> Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files		
07	141300 Ark	ansas River	at Great	Bend,	KansasContinued		
1972 1973 1974 1975 1976	5 12 12 13 1	5 1 1	2 1 2 2		WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1974, part 2 WRD-KS, 1975 WRD-KS, 1976		
1981	1				USGS-L		
07	'141400 Sou	th Fork Wal	nut Creek	near)ighton, Kansas	Drainage area = 0.81 square mile	
1967 1973	1 2				WSP 2014 WRD-KS, 1973, part 2	:	
07	141600 Lon	g Branch Cr	eek near	Ness C	ity, Kansas	Drainage area = 28.0 square miles	
1963	1	1			WSP_2096		
1968 1969	4 1	2			do. WSP 2146		
1972 1979	2 2	1 2			WRD-KS, 1972, part WRD-KS, 1979, vol.		
07	7141780 Wali	nut Creek n	ear Rush	Center	, Kansas	Drainage area = 1,256 square miles	
1981 1982	1	1			WRD-KS, 1981 WRD-KS, 1982		
07	'141795 Wal	ut Creek n	ear Rush	Center	, Kansas		
1958	4	3			WSP 1950		
07	141800 Otto	er Creek ne	ar Rush C	enter,	Kansas	Drainage area = 17.0 square miles	
1967 1972 1973	1 1 1	1			WSP 2014 WRD-KS, 1972, part WRD-KS, 1973, part		
		nut Creek a			; /: Jor.2, Ost.1, Ost.	Drainage area = 1,410 square miles 2. Ost.4	
1958 1959	1	1	•		WSP 1944		
1960	5 3	1			do. do.		
1961 1962	11 12	2 4			do. do.		
1963 1964	18	4 7			WSP 1950 WSP 1957		
965	7/ 8/	8			WSP 1964		
.966 .967	do. do.	3 5	5		WSP 1994 WSP 2014		
	do.	5	,		WSP 2096		
	do. do.	10 1			WSP 2146 WSP 2156		
.969	do.	9	3		WRD-KS, 1971, part 2		
.969 .970 .971			2		WRD-KS, 1972, part 2 WRD-KS, 1973, part 2		
1969 1970 1971 1972	do. do.						
.969 .970 .971 .972 .973	do. do. do.	1			WRD-KS, 1974, part 2		
.969 .970 .971 .972 .973 .974	do. do.	1			WRD-KS, 1975 WRD-KS, 1976		
1969 1970 1971 1972 1973 1974 1975 1976	do. do. do. do.		1		WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977		
1969 1970 1971 1972 1973 1974 1975 1976 1977	do. do. do. do. 2		1		WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2		
1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	do. do. do. do. 1 2 2	1	1		WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2 WRD-KS, 1980, vol. 2		
969 970 971 972 973 974 975 976 977 978 979 980 981	do. do. do. do. 2				WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2		
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1980 1981 1982	do. do. do. 4 1 2 2 1 4 2 2	1	1	t, Kans	WRD-KS, 1975 WRD-KS, 1976 WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2 WRD-KS, 1980, vol. 2 WRD-KS, 1981 WRD-KS, 1982		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

year	·	lumber of a	nalyses	Publication \(\frac{1}{2} \) or office file \(\frac{2}{2} \)	Additional information
rear	Suspended-sediment Concen- Particle tration size		Bed- Ban mater- mat ial ial size siz	k- er-	
	07142095 Walı	nut Creek n	ear Great Be	nd, Kansas	
1958	3	2		WSP 1950	
		:lesnake Cr	eek tributar		ansas Drainage area = 10.3 square miles
1977	1	· · · · · · · · · · · · · · · · · · ·		WRD-KS, 1977	
				ksville, Kansas s 3/: Blu.1, Ost.2,	Drainage area = 784 square miles Ost.4
1975	2 2			Blu.1	
1976 1977	1			do. WRD-KS, 1977; Blu	
1978 1979	4 3			WRD-KS, 1978; Blu WRD-KS, 1979, vol	
1980 1981	9			WRD-KS, 1980, vol	
1982	3			WRD-KS, 1981 WRD-KS, 1982	
1983	2			WRD-KS, 1983	
	07142620 Ratt Summary or in	lesnake Cr terpretive	eek near Ray publication	mond, Kansas s 3/: Alb.1, Ost 1, C	Drainage area = 1,167 square miles st.2, Ost.4
1960	7			WSP 1744	
1962 1963	10		5 2	WSP 1944 WSP 1950	
1964	1	1	_	WSP 1957	
.968 .977	3 1	1		WSP 2096 WRD-KS, 1977	
	07142800 Arka Summary or in				Drainage area = 37,613 square miles
1944	2	·		USCE-T	
	07142860 Cow Summary or in				Drainage area = 43.0 square miles
1966		•	1	WSP 1994	
1971 1979	3 1	3		WRD-KS, 1971, par WRD-KS, 1979, vol	
1980	3 3			WRD-KS, 1980, vol WRD-KS, 1981	. 2; Blu.1
				WRD-KS, 1982	
.981 .982	2				
1981 1982	2 1			WRD-KS, 1983	
1981 1982 1983	07142900 Bloc	d Creek ne	ar Boyd, Kan publication		Drainage area = 61.0 square miles st.4
1981 1982 1983 	07142900 Bloc Summary or ir	d Creek ne terpretive	ar Boyd, Kan publication	sas s 3/: Blu.1, Ost.2, O WRD-KS, 1971, par	st.4
1981 1982 1983 	07142900 Bloc Summary or ir 3 2 2	terpretive	ar Boyd, Kan publication	sas s 3/: Blu.1, Ost.2, O	st.4 t 2; Blu.1
.981 .982 .983 .971 .976 .977	07142900 Bloc Summary or ir	terpretive 2	ar Boyd, Kan publication	sas s 3/: Blu.1, Ost.2, O WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu Blu.1	st.4 t 2; Blu.1 .1
.981 .982 .983 .971 .976 .977 .979	07142900 Bloc Summary or ir 3 2 2 2 2	terpretive 2	ar Boyd, Kan publication	sas s ½: Blu.1, Ost.2, O WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu	st.4 t 2; Blu.1 .1
1981 1982 1983 	1 07142900 Bloc Summary or ir 3 2 2 2 2 4	2 1 Creek near	publication	sas s 3/: Blu.1, Ost.2, O WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu Blu.1 WRD-KS, 1980, vol	st.4 t 2; Blu.1 .1 . 2; Blu.1 Drainage area = 19.0 square miles
1981 1982 1983 	1 07142900 Blog Summary or ir 3 2 2 2 2 4	terpretive 2 1	publication	sas s ½: Blu.l, Ost.2, O WRD-KS, 1971, par Blu.l WRD-KS, 1977; Blu Blu.l WRD-KS, 1980, vol	st.4 t 2; Blu.1 .1 . 2; Blu.1 Drainage area = 19.0 square miles
1981 1982 1983 1971 1976 1977 1979 1980 0	1 07142900 Bloc Summary or ir 3 2 2 2 2 4 07143200 Plum 1	2 1 Creek near 1	publication Holyrood, K	sas s 3/: Blu.1, Ost.2, O WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu Blu.1 WRD-KS, 1980, vol	st.4 t 2; Blu.1 .1 . 2; Blu.1 Drainage area = 19.0 square miles
.981 .982 .983 .971 .976 .977 .979 .980 .971	1 07142900 Bloc Summary or in 3 2 2 2 4 07143200 Plum 1 07143300 Cow (Summary or int 1	2 1 Creek near 1	publication Holyrood, K	Sas s 3/: Blu.1, Ost.2, O WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu Blu.1 WRD-KS, 1980, vol ansas WRD-KS, 1971, par	st.4 t 2; Blu.1 .1 . 2; Blu.1 Drainage area = 19.0 square miles t 2 Drainage area = 728 square miles
1981 1982 1983 1971 1976 1977 1979 1980 0	1 07142900 Blog Summary or ir 3 2 2 2 2 4 07143200 Plum 1	2 1 Creek near 1	publication Holyrood, K	Sas Sas Sas WRD-KS, 1971, par Blu.1 WRD-KS, 1977; Blu Blu.1 WRD-KS, 1980, vol ansas WRD-KS, 1971, par	st.4 t 2; Blu.1 .1 . 2; Blu.1 Drainage area = 19.0 square miles t 2 Drainage area = 728 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983---Continued

Water		Number of a	nalyses	Publication 1/	Additional	Additional information	
year		i-sediment	Bed- Bank				
	Concen- tration	Particle size	mater- mate ial ial size size				
07	7143300 Cow	Creek near	Lyons, Kansa	sContinued			
1944	10 10			Blu.1			
1945 1946	5			do. do.			
1947	6			do.			
1948	2			do.			
1949 1950	7 3			do. do.			
1951	9			do.			
1952	1			do.			
1958 1960	1 8	3		WSP 1744, Blu.1 do.			
1961	6	3		WSP 1944, Blu.1			
1962	12			do.			
1963	13	7		Blu.1			
1964 1965	18 58	7 5		WSP 1957, Blu.1 WSP 1964, Blu.1			
1966	56	4	1	WSP 1994, Blu.1			
1967	40	5		WSP 2014			
1968 1969	56 55	2 5		WSP 2096; Blu.1 WSP 2146			
1970	25	J		WSP 2156			
1971	16	2		WRD-KS, 1971; Blu.1	1 1		
1972 1973	12 12			WRD-KS, 1972, part 2; B WRD-KS, 1973, part 2; B			
1974	13	1		WRD-KS, 1974, part 2; B			
1975	11	1		WRD-KS, 1975; Blu.1			
1976 1977	6 4			WRD-KS, 1976; Blu.1			
1978	2			WRD-KS, 1977; Blu.1 WRD-KS, 1978; Blu.1			
1979	4			WRD-KS, 1979, vol. 2; B			
1980	9 12	2		WRD-KS, 1980, vol. 2; B	lu.1		
1981 1982	4	2		WRD-KS, 1981 WRD-KS, 1982			
1983	8			WRD-KS, 1983			
Co	ow Creek nea	ar Nickerso	n, Kansas				
1944	1			USCE-T			
	7143330 Arka						
•			near Hutchin	son, Kansas 3/: Alb.1, Blu.1, Ost.1,		ea = 38,910 square mile	
1959						ea = 38,910 square mile	
1959 1960	ummary or in 3 14	nterpretive 4	publications 4	3/: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1		ea = 38,910 square mile	
1959 1960 1961	ummary or in 3 14 <u>8</u> /	nterpretive 4 26	publications 4 10	; 3∕: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1884 Blu.1		ea = 38,910 square mile	
1959 1960 1961 1962	ummary or in 3 14	nterpretive 4	publications 4	3/: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1		ea = 38,910 square mile	
1959 1960 1961 1962 1963	ummary or in 3 14 8/ do. do. do.	terpretive 4 26 4 4 5	4 10 13 13 12	## ## ## ## ## ## ## ## ## ## ## ## ##		ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964	ummary or in	aterpretive 4 26 4 4 5 9	4 10 13 13 12 7	3 3/: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1884 Blu.1 WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1		ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965	ummary or in 3 14 8/ do. do. do.	terpretive 4 26 4 4 5	4 10 13 13 12	### ### #### ########################		ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967	ummary or in 3 14 8/ do.	4 26 4 5 9 4 5	publications 4 10 13 13 12 7 3 5 4	## SP 1644, Blu.1, Ost.1, ## WSP 1644, Blu.1 ## WSP 1744, Blu.1 ## WSP 1884 Blu.1 ## WSP 1944, Blu.1 ## WSP 1950, Blu.1 ## WSP 1957, Blu.1 ## WSP 1964, Blu.1 ## WSP 1994 ## WSP 2014 ## WSP 2096, Blu.1		ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968	3 14 8/ do.	4 26 4 5 9 4 5 9 4 7	publications 4 10 13 13 12 7 3 5	### ### ##############################		ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970	3 14 8/ do. do. do. do. do. do. do	4 26 4 5 9 4 5 2 7 2	publications 4 10 13 13 12 7 3 5 4 15	### ### ##############################	Ost.2, Ost.4	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971	3 14 8/ do. do. do. do. do. do. do. do.	4 26 4 5 9 4 5 2 7 2 2 4	publications 4 10 13 13 12 7 3 5 4 15	### ### ##############################	Ost.2, Ost.4	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	3 14 8/ do. do. do. do. do. do. do. 13 12	4 26 4 4 5 9 4 5 2 7 2	publications 4 10 13 13 12 7 3 5 4 15	32: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1884 Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2014 WSP 2016 WSP 2156 WRD-KS, 1971, part 2; B WRD-KS, 1973, part 2; B	Ost.2, Ost.4 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973	wmmary or in 3 14 8/ do. do. do. do. do. do. do. do. do. 13 12 12 12	14 26 4 5 9 4 5 2 7 2 2 4 4 4	publications 4 10 13 13 12 7 3 5 4 15	### ### ##############################	Ost.2, Ost.4 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	3 14 8/ do. do. do. do. do. do. do. 13 12	4 26 4 5 9 4 5 2 7 2 2 4	publications 4 10 13 13 12 7 3 5 4 15	32: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1884 Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2014 WSP 2016 WSP 2156 WRD-KS, 1971, part 2; B WRD-KS, 1973, part 2; B	Ost.2, Ost.4 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1970 1971 1972 1973 1974 1975 1976	wmmary or in 3 14 8/ do.	1 4 26 4 4 5 9 4 5 2 7 2 2 2 4 4 4 2 2 1	publications 4 10 13 12 7 3 5 4 15 3 1 1 2 2 2 2 2 2	32: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1884 Blu.1 WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2014 WSP 2014 WSP 2146 WSP 2156 WRD-KS, 1971, part 2; B WRD-KS, 1972, part 2; B WRD-KS, 1974, part 2; B WRD-KS, 1974, part 2; B WRD-KS, 1975, Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1; US	lu.1 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1970 1971 1972 1973 1974 1975 1976	wmmary or in 3 14 8/ do. do. do. do. do. do. do. do. 13 12 12 13 7 7 3 4	1 terpretive 4 26 4 4 5 9 4 5 2 7 2 2 2 4 4 2 1	publications 4 10 13 12 7 3 5 4 15 3 1 1 2 2 2 2 2 2	### ### ### ### ### ### ### ### ### ##	lu.1 lu.1 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1969 1970 1971 1973 1974 1975 1976 1977 1978	wmmary or in 3 14 8/ do.	1 4 26 4 4 5 9 4 5 2 7 2 2 2 4 4 4 2 2 1	publications 4 10 13 13 12 7 3 5 4 15 3 1 1 2 2 2 2 2 2 2	### ### ### ### ### ### ### ### ### ##	lu.1 lu.1 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1966 1967 1970 1971 1972 1973 1974 1975 1977 1978 1977 1978 1978	ummary or in 3 14 8/ do. do. do. do. do. do. 20 13 12 12 12 13 7 3 4 6 8 6	1 terpretive 4 26 4 4 5 9 4 5 2 7 2 2 2 4 4 2 1	publications 4 10 13 12 7 3 5 4 15 3 1 1 2 2 2 2 2 2	32: Alb.1, Blu.1, Ost.1, WSP 1644, Blu.1 WSP 1744, Blu.1 WSP 1944, Blu.1 WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2014 WSP 2014 WSP 2156 WRD-KS, 1971, part 2; B WRD-KS, 1972, part 2; B WRD-KS, 1974, part 2; B WRD-KS, 1975, Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1; US WRD-KS, 1978; Blu.1 WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; B WRD-KS, 1980, vol. 2; B WRD-KS, 1980, vol. 2; B WRD-KS, 1981	lu.1 lu.1 lu.1 lu.1 lu.1	ea = 38,910 square mile	
1959 1960 1961 1962 1963 1964 1965 1967 1968 1969 1970 1971 1972 1973 1974 1975	ummary or in 3 14 8/ do. do. do. do. do. do. 12 12 13 7 3 4 6 8	1 2 2 2 4 4 4 2 1 1 2 2	publications 4 10 13 13 12 7 3 5 4 15 3 1 1 2 2 2 2 2 2 2	### ### ### ### ### ### ### ### ### ##	lu.1 lu.1 lu.1 lu.1 lu.1	ea = 38,910 square mile	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nu	mber of ana	yses	Publication 1/ or office file 2/	Additional information	
year	Suspende	d-sediment	Bed- Bank-	or office file4		
	Concen- tration	Particle size	mater- mater- ial ial size size			
	07143600 Lit	tle Arkansas	River at Litt	le River, Kansas	Drainage area = 71.0 square miles	
1959	3			WSP 1744		
1960 1971	5 3	1		do. WRD-KS, 1971, part 2		
	07143625 Wol	f Creek near	Inman, Kansas			
1958	2	2		WSP 1884		
1959 1960	2 9			do. do.		
1961	3			do.		
	07143630 Lit	tle Arkansas	River at Medo	ra, Kansas		
1958	2	2		WSP 1744		
1960 1966	8		1	do. WSP 1994		
	07143635 Bla	ze Fork Cree	ek at Buhler, Ka	ansas	الله المقالمة التحكيم في روحة على المقالمة في يون والموافقة في الموافقة والموافقة والمعالمة الموافقة والمعالمة	
1961	10	4		WSP 1884		
-	07143641 Dry	Creek at Mc	Pherson, Kansas	5		
1959	2			WSP 1884		
1960 1961	9 6			do.		
1901	U			uu.		
1959	07143645 Dry 1	Creek near	McPherson, Kans	sas WSP 1884		
1960	9	1		do.		
1961	10	1		do.		
(07143651 Tur	key Creek ne	ear Elyria, Kans	sas		
1960 1961	7	1		WSP 1884 do.		
	07143653 Tur	key Creek ne	ear Elyria, Kans	sas		
1959	1			WSP 1884		
1960 1961	3 5			do. do.		
	07143660 Tur	key Creek ne	ear Buhler, Kans	545	Drainage area = 180 square miles	
1958	3	2		WSP 1744		
1960 1961	8 12	_		do. WSP 1884		
	07143663 Cro	oked Creek r	near Buhler, Ka	nsas		
1959 1960	1 2		•	WSP 1744		
				do.		
1	07143665 Lit Summary or i	tle Arkansas nterpretive	River at Alta publications3	Mills, Kansas : Blu.l	Drainage area = 736 square miles	
1960 1976	3 6			WSP 1744, Blu.1 WRD-KS, 1976; Blu.1		
1977	5	_		WRD-KS, 1977; Blu.1		
1978 1979	5 3	1 1		WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu.1		
1980	9	-		WRD-KS, 1980, vol. 2; Blu.1		
1981 1982	6 6			WRD-KS, 1981 WRD-KS, 1982		
1983	7	2		WRD-KS, 1983		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nu	mber of ana	lyses		Publication 1/ or office file 2/	Additional information
year 		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files	
07	143695 Blac	ck Kettle C	reek nea	r Alta i	Mills, Kansas	
1958 1960 1961	1 9 12	1 2			WSP 1884 do. do.	
07	143900 Lit	tle Arkansa	s River	near Ha	Istead, Kansas	Drainage area = 812 square miles
1960	3				WSP 1744	
07	143915 Kis	iwa Creek n	ear Burr	ton, Ka	nsas	
1960 1961	7 8	1			WSP 1884 do.	
07	143923 Kis	iwa Creek n	ear Patt	erson,	Kansas	
1960 1961	6 8	1 1			WSP 1884 do.	
07	143928 Kis	iwa Creek n	ear Hals	tead, K	ansas	
1958 1959 1960 1961	4 14 20 8	3 11 1			WSP 1884 do. do. do.	
07	143935 Wes	t Emma Cree	k near C	anton,	Kansas	
1960 1961	3 4				WSP 1884 do.	
07	143945 Wes	t Emma Cree	k near M	oundrid	ge, Kansas	
1959 1960 1961	1 11 7	3 1			WSP 1884 do. do.	
07	143955 Wes	t Emma Cree	k near H	esston,	Kansas	
1960 1961	4 10				WSP 1884 do.	
07 1959 1960	143965 Wes 9 14	t Emma Cree 3	k near H	alstead	, Kansas WSP 1884 do.	
07	143975 Eas	t Emma Cree	k at Zim	merdale	, Kansas	
1960 1961	6 6				WSP 1884 do.	
07	143985 Mid	dle Emma Cr	eek at H	esston,	Kansas	
1959 1960 1961	3 7 11				WSP 1884 do. do.	
07	144000 Eas	t Emma Cree	k near H	alstead	, Kansas	Drainage area = 58.0 square mile
1958 1960	1 5	1			WSP 1884	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	Num_	per of anal	yses	_ Publication \frac{1}{2} \rightarrow or office file \frac{2}{2}	Additional information
<i></i>	Suspended Concen- tration	-sediment Particle size	Bed- Bank- mater- mater ial ial size size		
	07144035 Emma	Creek near	Sedgwick, Ka	nsas	
1958	3	2		WSP_1884	
1959 1960 1961	2 13 7	4		do. do. do.	
	07144090 Sand	Creek near	Sedgwick, Ka	nsas	<u> </u>
1958 1960	2 2	2		WSP 1744 do.	
	07144100 Litt	le Arkansas	River at Fry	Bridge near Sedgwick, Kans	as
1961 1960	15 39	3 2	3	WSP 1884 WSP 1744	
	07144140 Jest	er Creek ne	ar Valley Cen	ter, Kansas	
1958 1960	2 4	1 2		WSP 1744 do.	
1944 1945 1946 1947 1948 1949 1950 1951 1952 1957 1958 1959 1960	4 10 3 2 2 8 3 6 3 9 do.	1 4	1 4 2 3	Blu.1 do. do. do. do. do. do. do. do. WSP 1522, WSP 1573, Blu.1 WSP 1573, Blu.1 WSP 1644, WSP 1744, Blu.1 WSP 1744, Blu.1	
1961 1962 1963 1965 1966 1967 1968 1970 1971 1972 1973 1974	22 3 9 1 7 4 2 3 4 5 6	19 21 1	6 1 1	WSP 1884, Blu.1 WSP 1944, Blu.1 Blu.1 do. WSP 1994, Blu.1 WSP 2014, Blu.1 WSP 2096, Blu.1 WSP 2146, Blu.1 WSP 2156, Blu.1 Blu.1 do. do. do.	
1962 1963 1965 1966 1967 1968 1969 1970 1971 1972 1973	22 3 9 1 7 4 2 3 4 5 6	21	6	WSP 1944, Blu.1 Blu.1 do. WSP 1994, Blu.1 WSP 2014, Blu.1 WSP 2096, Blu.1 WSP 2146, Blu.1 WSP 2156, Blu.1 Blu.1 do. do.	
1962 1963 1965 1966 1967 1968 1970 1971 1972 1973 1974 1977 1978 1979 1980 1981 1983	22 3 9 1 7 4 2 3 4 5 6 11 4 3 3 4 1 1	1 1	2	WSP 1944, Blu.1 Blu.1 do. WSP 1994, Blu.1 WSP 2014, Blu.1 WSP 2096, Blu.1 WSP 2156, Blu.1 Blu.1 do. do. Blu.1, USGS-L WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu. WRD-KS, 1980, vol. 2; Blu. WRD-KS, 1981	
1962 1963 1965 1966 1967 1968 1969 1970 1971 1972 1973 1978 1979 1980 1981 1982 1983	22 3 9 1 7 4 2 3 4 5 6 11 4 3 3 4 1 1	1 1	2	WSP 1944, Blu.1 Blu.1 do. WSP 1994, Blu.1 WSP 2014, Blu.1 WSP 2096, Blu.1 WSP 2156, Blu.1 Blu.1 do. do. Blu.1, USGS-L WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu. WRD-KS, 1980, vol. 2; Blu. WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	
1962 1963 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1977 1978 1980 1981 1982 1983	22 3 9 1 7 4 2 3 4 5 6 11 4 3 3 4 1 1 1	1 1 1 4	1 1 2 1 oodway at Val	WSP 1944, Blu.1 Blu.1 do. WSP 1994, Blu.1 WSP 2014, Blu.1 WSP 2096, Blu.1 WSP 2156, Blu.1 Blu.1 do. do. do. Blu.1, USGS-L WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu. WRD-KS, 1980, vol. 2; Blu. WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983 ley Center, Kansas WSP 1573 do. WSP 1644	.1

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Num	ber of ana	lyses	·	Publication 1/ or office file 2/	Additional information	
year	Suspended Concen- tration	-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office fried		
07	7144300 Arka	nsas River	at Wich	ita, Ka	nsas	Drainage area = 40,490 square mile	
1958 1960 1961 1971 1981	1 1 9 1 1	1 1 5 1	4		WSP 1884 do. WSP 1884, WSP 2096 WRD-KS, 1971, part 2 WRD-KS, 1981		
0:	7144400 West	Fork Chis	holm Cre	ek Trib	utary at Valley Center, Kansa	s Drainage area = 5.22 square mile	
1958 1959 1961	2 1 7				WSP 1884 do. do.		
	7144550 Arka ummary or in					Drainage area = 40,830 square mile	
1971 1981	1	1			WRD-KS, 1971, part 2 WRD-KS, 1981		
					ove Cheney Reservoir, Kansas /: Alb.1, Blu.1, Ost.1, Ost.4	Drainage area = 787 square miles	
1966 1967 1968 1969 1971 1972 1973 1974 1975 1976 1977 1978 1980 1981 1982 1983	12 10 24 18 24 26 23 20 21 14 13 7 8 13 6	1 1 2 1 1	6 3 12 17 3 2 2 2 2 2 2 2 2 2 2	2	WSP 1994 WSP 2014 WSP 2016 WSP 2096, Blu.1 WSP 2146 WRD-KS, 1971, part 2; Blu.1 WRD-KS, 1972, part 2; Blu.1 WRD-KS, 1973, part 2; Blu.1 WRD-KS, 1975; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1 WRD-KS, 1977; Blu.1 WRD-KS, 1978; Blu.1; USGS-L WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983		
07 Si	7144800 Nort ummary or in	h Fork Nin terpretive	nescah R publica	iver ne tions <u>3</u>	ar Cheney, Kansas /: Alb.1, Col.1	Drainage area = 930 square miles	
1958 1960 1961 1962 1963	1 3 16 11 20	6 1 9	1 7 8 13		WSP 1744, USCE-T WSP 1744, WRD 1884 WSP 1884 WSP 1944, WSP 1950 WSP 1950	Before Cheney Reservoir Do. Do. To. Do.	
					ah River near Pratt, Kansas /: Alb.1, Blu.1	Drainage area = 21 square miles	
1964 1965 1967 1969 1976 1977 1979	2 8 2 7 2 1	2 7 2 2	1	2	WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014 WSP 2146 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1 USGS-L WRD-KS, 1981		
0 1981 1983	7144910 Sout 2 7	h Fork Nin	nescah R	iver at	Pratt, Kansas WRD-KS, 1981 WRD-KS, 1983	Drainage area ≈ 117 square miles	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1383--Continued

Water	***************************************	ber of ana	lyses		ation $1/$ Additional information ice file $2/$
year		-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	ce miez
	07145000 Sout Summary or in				
1963 1964	4 3	3	2	WS WS	
	07145130 Sout	h Fork Nin	nescah Ri	iver near	ta, Kansas Drainage area = 374 square miles
1964	3		2	WS	57
	07145150 Sout	h Fork Nin	nescah Ri	iver near	nan, Kansas
1964	3		2	WS	57
	07145200 Sout Summary or in				ock, Kansas Drainage area = 650 square miles 1, Blu.1, Ost.1, Ost.4
1961 1962 1963 1964 1965 1966 1967 1968 1970 1971 1972 1974 1975 1977 1980 1981 1982 1983	7/ 26 12 15 13 15 9 12 14 11 14 12 8 4 4 1 3 7 6 3 7	1 6 2 6 1 2 2 1 1 1 2 1 1	4 16 13 21 5 3 6 14 3 2 2 2 2 2 2 2 2 2 2 2 2 2	WS W	14, WSP 1950; Blu.1 10, Blu.1 157, Blu.1 144 14 146 166, Blu.1 166 166 1971, part 2; Blu.1 1, 1972, part 2; Blu.1 1, 1973, part 2; Blu.1 1, 1974, part 2; Blu.1 1, 1975; Blu.1 1, 1976; Blu.1 1, 1977; Blu.1; USGS-L 1, 1978; Blu.1 1, 1979, vol. 2; Blu.1 1, 1980, vol. 2; Blu.1 1, 1981 1, 1982 1, 1982 1, 1983
	07145500 Ninne Summary or in	escah River terpretive	r near Pe publicat	eck, Kansa ions <u>3</u> /:	Drainage area = 2,129 square miles , Blu.1, Col.1, Ost.1, Ost.2, Ost.4, USEng.1
1940 1941 1942 1943 1944 1945 1946 1947 1950 1951 1952 1958 1960 1961 1962 1963 1964	6 11 13 9 10 11 6 3 6 5 3 8 7 1 1 4 16 12 15 16 17	2 5 3 5 5 6	1 6 8 14 13	WS WS WS	Before Cheney Reservoir Do. Do. Do. Do. Do. Do. Do. Do

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nur	mber of ana	yses		Publication1/ or office file2/	Additional information
year	Suspender Concen- tration	Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files	
07	145500 Nin	nescah Rive	near P	eck, Ka	nsasContinued	
1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1983	15 14 13 12 12 1 13 12 10 6 3 3 6 8 6	6 3 2 1 1 3 1 1 1 1	2 6 6 3 2 2 2 1 2 2 2 2 2 1	2 2	WSP 2014 WSP 2096, Blu.1 WSP 2146, Blu.1 WSP 2156 WRD-KS, 1971, part 2; Blu.1 WRD-KS, 1972, part 2; Blu.1 WRD-KS, 1973, part 2; Blu.1 WRD-KS, 1974, part 2; Blu.1 WRD-KS, 1975; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1978; Blu.1; USGS-L WRD-KS, 1978; Blu.1; USGS-L WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983	Downstream from Cheney Reservoir Do.
		te Creek at iterpretive				Drainage area = 154 square miles
1976 1977 1978 1979 1980 1981 1982 1983	3 3 1 5 8 5 2 8	1			Blu.1 WRD-KS, 1977; Blu.1 Blu.1 WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	
		ansas River nterpretive			ty, Kansas /: Alb.1, Blu.1, Col.1, Ost.1	Drainage area = 43,713 square mile , Ost.2, Ost.4, USEng.1
1907 1943 1944 1945 1958 1961 1962 1963 1964 1965 1966 1967 1970 1971 1973 1974 1975 1977 1978 1979 1971 1978 1979 1980 1981 1982	9/ 39 12 41 39 17/ 8/ do. do. do. do. do. do. do. do. 10 4 10 11 11 7 8	3 17 11 5 11 8 4 6 1 7 2 3 3 5 2 3 1 2 1 1 1 8	4 10 13 13 11 2 1 9 11 1 2 2 2 2 1 1 1 1	2	WSP 273 Blu.1 do. do. WSP 1884, Blu.1 WSP 1884, WSP 1944, Blu.1 WSP 1884, WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 2014, Blu.1 WSP 2014, Blu.1 WSP 2016 WSP 2016 WSP 2146 WSP 2156 WRD-KS, 1971, part 2; Blu.1 WRD-KS, 1972, part 2; Blu.1 WRD-KS, 1975; Blu.1 WRD-KS, 1975; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1; USGS-L WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1	
		e Creek neam			as ': Blu.1, Ost.4	Drainage area = 30 square miles
1962 1963 1964 1971 1976 1977	6 4 5 2 2 1 2	5 3		2	WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1 WRD-KS, 1971, part 2; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1; USGS-L Blu.1	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	Suspe	ended	ber of ar -sediment Particle		Publication 1/ or office file2	
	trat		size	ial i		
	07146600	(East	t Branch)	Walnut Rive	r near El Dorado, Ka	nsas Drainage area = 151 square miles
1963 1964		2	2 1		WSP 1950 WSP 1957	
	07146800	West	Branch W	Malnut River	near El Dorado, Kans	as Drainage area = 62.0 square miles
1962 1963		2 1	1		WSP 1944 WSP 2096	
	07146850	Walnı	ut Creek	near El Dor	ido, Kansas	
1962 1963		1 2	1 2		WSP 1950 do.	
	07146900	Walnu	ut Creek	near August	ı, Kansas	
1962 1963		1	3		WSP 1950 do.	
1964 1965		3	Ū		WSP 1957 WSP 1964	
1966 1982		1		1	WSP 1994 WRD-KS, 1982	
	07146006	White	awaton Di	von 2 milos		
1978		1	ewater Ki	ver 2 miles	north of Potwin, Kan WRD-KS, 1978	242
	07146990	White	water Di	ver 3 miles	south of Dotwin Kan	sas (below Potwin) Drainage = 162 square mile
1967	07140330	2	2	ver 5 miles	WSP 2014	area
1978		1		1	WRD-KS, 1978	
	07147010	White	ewater Ri	ver 6 miles	northwest of Towanda	, Kansas
1978		1		1	WRD-KS, 1978	
	07147040	West	Branch W	hitewater R	ver at Whitewater, K	ansas
1962		4			WSP 1944	
	07147050	West	Branch W	hitewater R	ver near Furley, Kan	sas Drainage area = 88.0 square miles
1967 1968		1	1		WSP 2014 WSP 2096	
	07147060	West	Branch W	hitewater R	ver near Benton, Kan	sas Drainage area = 177 square miles
1967 1978		1	1	1	WSP 2014 WRD-KS, 1978	
	07147070 Summary (White or int	ewater Ri terpretiv	ver at Towar e publicatio	da, Kansas ns 3/: Blu.1, Jor.2,	Drainage area = 426 square miles Ost.1, Ost.2, Ost.4
1961		11	2	7	WSP 1884, Blu.1	
1962 1963		16 10	7		WSP 1944, Blu.1 WSP 1950, Blu.1	
1964 1965	_	l6	3 2		WSP 1957, Blu.1 WSP 1964, Blu.1	
1966 1967		3 5	5		WSP 1994 WSP 2014	
19 6 8 1969		27 25	6		WSP 2096, WSP 2: WSP 2146	146, Blu.1
1970	1	4	3		WSP 2156	

dater year	Nui Nui	mber of ana	yses		Publication <u>1</u> / or office file <u>2</u> /	Additional information
, eui	Suspender Concen- tration	d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	·	
	07147070 Whi	tewater Rive	er at To	wanda,	KansasContinued	
1976 1977 1978 1979 1980 1981 1982 1983	2 19 7 5 6 6 5 6	13 3	1 1	2	WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1; USGS-L WRD-KS, 1978; Blu.1 WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	
	07147100 Whi	tewater Rive	er at Au	gusta,	Kansas	Drainage area = 456 square miles
1962 1963 1964	1 1 1	1			WSP 2096 do. WSP 1957	
-	07147410 Lit	tle Walnut I	River ne	ar Doug	lass, Kansas	
1962 1963	1	1			WSP 2096 do.	
1962 1963 1964	07147500 Wali 2 2 2 3	nut River ne 2 2 2 2	ear Doug	lass, K	ansas WSP 1944 WSP 1950 WSP 1957	Before El Dorado Lake Do. Do.
	07147600 Tim	ber Creek no	ear Wilm	ot, Kan	sas	Drainage area = 63.0 square miles
1963	1	1			WSP 2096	
	07147800 Wall Summary or i				sas /: Blu.1, Col.1, Jor.2, Ost.1	Drainage area = 1,872 square mile , Ost.2, USEng.1
1907 1908 1943 1944 1945 1961 1962 1963 1964 1965 1968 1970 1971 1973 1974 1975 1977 1979 1980 1981 1982	9/ 27 do. 4 6 21 27 7/ 8/ do.	8 8 7 6 8 4 4 11 1 1 2	l	l er. Kan	WSP 273 do. Blu.1 do. do. do. WSP 1884, WSP 1944, Blu.1 WSP 1944, Blu.1 WSP 1950, Blu.1 WSP 1957, Blu.1, USCE-T WSP 1964, Blu.1, USCE-T WSP 1994 WSP 2014 WSP 2014 WSP 2014 WSP 2146 WSP 2156 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2; Blu.1 WRD-KS, 1973, part 2; Blu.1 WRD-KS, 1976, Blu.1 WRD-KS, 1977, Blu.1; USGS-L WRD-KS, 1976; Blu.1 WRD-KS, 1977, vol. 2; Blu.1 WRD-KS, 1979, vol. 2; Blu.1 WRD-KS, 1980, vol. 2; Blu.1 WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1983	Before El Dorado Lake Do.
1977	1	use creek ne	ear vext	er, kan	WRD-KS, 1977	Diamage area - 170 Square miles
	07148300 Sal	t Fork Rive	r near A	etna, K	ansas	Drainage area = 591 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	N	umber of ana	lyses	Pu	ublication』/ office file2/	Additional information
year	Suspend Concen- tration		mater- m ial i	ank-	office thres	
	07148600 Me	dicine Lodge	River at	Sun City	, Kansas	Drainage area = 335 square miles
1966			1	WSF	P 1994	
	07148790 Me	dicine Lodge	River at	Medicine	Lodge, Kansas	
1958	2	2		WS	P 1950	
		dicine Lodge in t erpretive			Kansas Blu.1, Col.1, Ost.1, Ost	Drainage area = 940 square miles :.2, Ost.4, USEng.1
1907 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1958 1961 1962 1963 1965 1966 1969 1976 1977 1978 1979 1979 1979	9/ 20 11 16 18 7 9 11 30 52 12 18 17 15 19 1 4 3 3 1 6 2 6 7 7 3 3 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	1 2 1 5 2	1 1 3 10 1	B1 i	2 273 2.1 10. 10. 10. 10. 10. 10. 10.	1
1907	Chikaskia R	liver at Argo	nia, Kansa		· 273	
	07151500 Ch	ikaskia Rive interpretive		bin, Kans		Drainage area = 794 square miles
1962 1963 1964 1965 1966 1976	7/ 8/ do. do.	2 4 6 9	15 13 11 1	NSI WSI WSI WSI	P 1944, WSP 1950 P 1950 P 1957 P 1964 P 1994 D-KS, 1976	
	07155590 Ci	marron River	near Elkh	art, Kans	sas	Drainage area = 2,899 square mile
1977 1980 1981	6 2 1	2		WRI	D-KS, 1977 D-KS, 1980, vol. 2 D-KS, 1981	
	07155700 Ci	marron River	near Ulys	ses, Kan	sas	
1961	3	2		WSI	P 1884	
	07155900 No	orth Fork Cim	arron Rive	r tributa	ary near Elkhart, Kansas	Drainage area = 75.0 square miles
1971	1			WR	D-KS, 1971, part 2	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

later ear	Nu Nu	mber of a	nalyses		Publication1/ or office file2/	Additional information
eai	Suspende Concen- tration	d-sedimer Particle size	mater-	Bank- mater- ial size	or office files	
	07156000 Nor	th Fork C	imarron Riv	er tri	butary near Richfield,	Kansas Drainage area = 103 square miles
962 963 977	1 4 1	1 2 1	1		WSP 2096 WSP 1950, WSP 2096 WRD-KS, 1977	
	07156010 Nor Summary or i	th Fork (nterpreti	imarron Riv	er at ions3/	Richfield, Kansas : Blu.1	Drainage area = 463 square miles
.976 .977 .978 .980	2 4 2	2	1	13	WRD-KS, 1976; Blu.1 WRD-KS, 1977; Blu.1 WRD-KS, 1978; Blu.1 USGS-L	
	07156200 Nor	th Fork (imarron Riv	er nea	r Ulysses, Kansas	Drainage area = 1,640 square miles
1962 1963 1966 1968 1969 1970 1971 1972	1 1 1 1 6 1 1 5	1 1	1	13	WSP 2096 do. do. WSP 2146 WSP 2156 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 USGS-L	
	07156220 Bea Summary or i				as ': Blu.1, Ost.1	Drainage area = 835 square miles
.969 .971 .972 .977 .979	20 1 3 1 2	15 1	4	2 7	WSP 2146 Blu.1 WRD-KS, 1972, part 2; WRD-KS, 1977; Blu.1 Blu.1, USGS-L USGS-L	Blu.1
	07156600 Cim	arron Riv	er Tributar	y near	Moscow, Kansas	Drainage area = 13.0 square miles
963	1				WSP 2096	
	07156750 Cim (Formerly pu Summary or i	blished a	s Station N	umber		Drainage area = 7,452 square miles , USEng.1
1938 1939 1940 1941 1942 1943 1961 1963 1964 1965 1966 1969 1970 1971 1975	3 12 7 14 14 2 1 1 4 3 7 4 6 5 3 1 1	1 2 2 2 2 3	1 1 2 5 3 3 3 2		Blu.l do. do. do. do. do. WSP 1950, Blu.l WSP 2096 WSP 1950, WSP 2096, B WSP 1957, Blu.l WSP 1964, Blu.l WSP 1994 WSP 2096, Blu.l do. WSP 2146 Blu.l WRD-KS, 1971, part 2; Blu.l	
			er near lib	eral.	Kansas	Drainage area = 8,254 square miles
	07156800 Cim	marron Kiv	c 215	c. c.,		

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water	Nu	mber of ana	lyses		Publication 1/or office file 2/	Additional information
/ear		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
	07156900 Cim Summary or i				klahoma /: Ost.1, Ost.4	Drainage area ≈ 8,536 square miles
1966	1	1	1		WSP 1994	
1967 1968	5 3	2 1	3 3		WSP 2014 WSP 2096	
1971 1977	2	•	3.	2	WRD-KS, 1971, part USGS-L	2
	07157000 Cim	arron River	near Moo	ane, O	klahoma	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
1964	3	1			WSP 1957	
1965	10	4	6		WSP 1964	
1966	2	1	2		WSP 2096	
	07157100 Cro	oked Creek	near Cop	eland,	Kansas	Drainage area = 44.0 square miles
1966			1		WSP 1994	
	07157200 Cro	oked Creek	near Fow	ler, Ka	nsas	Drainage area = 524 square miles
1966			1		WSP 1994	
1944 1945 1947 1948 1961 1962 1963 1964 1965 1966 1967 1970 1971 1972 1975 1976 1977 1978 1979 1981 1981	19 12 3 5 4 4 5 4 10 3 6 9 3 9 2 3 8 2 9 8 3 1 3 6 1	1 1 2 1 2 1	3 2 4 5 3 3 2	2	Blu.1 do. do. do. WSP 1944 WSP 1944 WSP 1950, WSP 2096 WSP 1950, WSP 2096 WSP 1957, Blu.1 WSP 1964, Blu.1 WSP 1994 WSP 2014, WSP 2096 WSP 2146 WSP 2146 WSP 2156 WRD-KS, 1971, part WRD-KS, 1973, part WRD-KS, 1975; Blu. WRD-KS, 1976; Blu. WRD-KS, 1976; Blu. WRD-KS, 1978; Blu. WRD-KS, 1978; Blu. WRD-KS, 1978; Blu. WRD-KS, 1978; Blu. WRD-KS, 1979, vol. WRD-KS, 1980, vol. WRD-KS, 1981 WRD-KS, 1981 WRD-KS, 1981	, Blu.1 2; Blu.1 2; Blu.1 2; Blu.1 1 1 1 1; USGS-L 1 2; Blu.1
	3 07157580 Cim. Summary or ii 9/ 26 do. 4 5 18 19 30				WRD-KS, 1983 , Kansas : Blu.1, USEng.1 WSP 273 do. Blu.1 do. do. do.	Drainage area = 10,960 square miles
1942	13 07157700 Kiga 1 1	er Creek ne	ar Ashla	nd, Kans	do.	Drainage area ≈ 34.0 square miles 2

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

water year		Number of ar	alyses		Publication1/ or office file2/	Additional information
ear	Suspended Concen- tration	d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or orrice tries	
1	07157740 Cir	marron River	near E	Buttermi	lk, Kansas	Drainage area = 11,120 square miles
.977 .97B .979	2 3 5	2			WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2	?
	07157800 Blu	ff Creek nea	r Prote	ection,	Kansas	Drainage area = 303 square miles
1961 1962 1963 1963 1963 1967	3 2 3	1	2 3 1 3 1		WSP 1944 do. WSP 1950, WSP 2096 WSP 1950 do. WSP 2096 do.	
	07157900 Cava Summary or in				ansas /: Blu.1, Ost.1, Ost.	Drainage area = 39.0 square miles .2
1963 1966 1967 1968 1969 1971 1972 1973 1974 1975 1976 1977 1978 1978 1979 1981	1 1 2 13 11 12 14 3 3 14 10 5 1 2 3 3	1 1 2	1 4 10 3 2 2 1	2	Blu.1 do. WSP 2014 WSP 2096, Blu.1 WSP 2146 WRD-KS, 1971, part 2 WRD-KS, 1972, part 2 WRD-KS, 1973, part 2 WRD-KS, 1975; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1976; Blu.1 WRD-KS, 1978; Blu.1 WRD-KS, 1978; Blu.1 WRD-KS, 1978; Blu.1 WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. 2 WRD-KS, 1981 WRD-KS, 1981 WRD-KS, 1981	2; Blu.1 2; Blu.1 2; Blu.1 ; USGS-L 2; Blu.1
	07157940 Blui	ff Creek nea	ır Butte	ermilk,	Kansas	Drainage area = 657 square miles
.977 .978 .979	2 2 2				WRD-KS, 1977 WRD-KS, 1978 WRD-KS, 1979, vol. 2	2
		digris River	near M	Madison, itions 3	/: Blu.1, Ost.1	Drainage area = 181 square miles
1956 1957 1958 1959 1950 1961 1962 1963 1964 1964 1964 1966 1977 1970 1971 1972 1973 1974 1975 1977	3 13 30 31 29 32 33 28 29 31 26 24 30 29 28 30 30 31 21 19 18		1		Blu.1 do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	Number of	analyses	Publication <u>1/</u> or office file <u>2/</u>	Additional information
/ear	Suspended-sediment Concen- Particle tration size	Bed- Bank- mater- mater- ial ial size size	or orrice 11102	
	165900 Toronto Lake o mmary or interpretive			Drainage area = 730 square miles
966	9		Blu.1	
1968 1969	43 1		do. do.	
1970	34		do.	
.971	50		do.	
.972	49		do.	
.973 .974	45 44		do. do.	
975	44		do.	
976	48		do.	
977 .978	40 9		do. do.	
07 Sur	166000 Verdigris Rive	er near Coyville publications 3	, Kansas /: Blu.1, Col.1, Ost	Drainage area = 747 square miles .1, USEng.1
940	7		Blu.1	Before Toronto Lake
941	13		do.	Do.
.942 .943	17 4		do. do.	Do. Do.
944	11		do.	Do.
945	22		do.	Do.
.946	9		do.	Do.
947	9		do.	Do.
.948 949	7 2		do. do.	Do. Do.
950	6		do.	Do.
951	13		do.	Do.
.952	5		do.	Do.
.953 .954	2 5		do. do.	Do. Do.
955	3		do.	Do.
956	8		do.	Do.
957	16		do.	Do.
.958 .959	24 12		do. do.	Do. Do.
960	17		do.	Downstream from Toronto Lake
961	24		do.	Do.
962	20		do.	Do.
963 .964	20 9		Blu.1, USGS-L Blu.1	Do. Do.
965	38		do.	Do.
966	12		do.	Do.
967	12		do.	Do.
.968 .969	24 28		do. do.	Do. Do.
970	15		do.	Do.
971	11		do.	Do.
.972	12		do.	Do.
973 974	22 19		do. do.	Do. Do.
975	13		do.	Do.
.976	5		do.	Do.
977 978	8	1	do. 81:: 1 SGS_1	Do.
1978 07	5 166500 Verdigris Rive	1 er near Altoona	Kansas	Do. Drainage area = 1,138 square miles
	mmary or interpretive	: publications 2		
.940 1941	11 15		Blu.1 do.	Before Toronto Lake Do.
1942	16		do.	Do.
943	4		do.	Do.
1944	12 27		do.	Do.
1945 1946	27 B		do. do.	Do. Do.
	12		do.	Do.
1947 1948	10		do.	Do.
1947 1948 1949	2		do.	Do.
1947 1948				

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

year	N	lumber of an	alyses	Publication1/	Additional information
	Suspended	l-sediment	Bed- Bank-	or office file2/	
	Concen-	Particle	mater- mater	-	
	tration	size	ial ial size size		
07	7166500 Verd	iaris River	near Altoona	, KansasContinued	
953	1	•		Blu.1	Before Toronto Lake
954	4			do.	Do.
955	4			do.	Do.
956 057	6			do.	Do.
957 958	12 26			do. do.	Do. Do.
959	13			do.	Do.
960	15			do.	Downstream from Toronto Lake
961	33	2		Blu.1, WSP 1884	Do.
962	16			Blu.1	Do.
963 964	7 5			do. do.	Do. Do.
965	23			do.	Do.
966	23 5		1	Blu.1, WSP 1994	Do.
967	10		-	Blu.1	Do.
968	12			do.	Do.
969	20			do.	Do.
970 271	11			do.	Do.
971 972	13 14			do. do.	Do. Do.
972 973	19			do.	Do.
974	9			do.	Do.
975	15			do.	Do.
976	5			do.	Do.
977 978	10 5			do. do.	Do. Do.
947 948 949	9 10 1	1		Blu.1 do. do.	
949	1			do.	
950 051	4	4		do.	
951 954	2 2			do. do.	
955 955	2			do.	
956	4			do.	
957	11			do.	
958	5			do.	
959 960	8 8			do. do.	
960 961	13			do.	
	9			444	
50 2				do.	
	6			do. do.	
963 964	6 7			do. do.	
963 964 965	6 7 18		1	do. do. do.	
963 964 965 966	6 7 18 5		1	do. do. do. WSP 1994, Blu.1	
963 964 965 966 967	6 7 18 5 9		1	do. do. do. WSP 1994, Blu.1 Blu.1	
963 964 965 966 967 968	6 7 18 5		1	do. do. do. WSP 1994, Blu.1	
963 964 965 966 967 968 969	6 7 18 5 9 8 10 6		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do.	
963 964 965 966 967 968 969 970	6 7 18 5 9 8 10 6		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do. do.	
963 964 965 966 967 968 970 971	6 7 18 5 9 8 10 6 6		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do. do. do.	
963 964 965 966 967 968 969 970 971 972	6 7 18 5 9 8 10 6 6 4		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do. do. do. do.	
963 964 965 966 967 968 969 970 971 972	6 7 18 5 9 8 10 6 6		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do. do. do.	
963 964 965 966 967 968 970 971 972 973 974	6 7 18 5 9 8 10 6 6 4 8			do. do. do. WSP 1994, Blu.1 Blu.1 do.	
963 964 965 966 967 968 970 971 972 973 974 975	6 7 18 5 9 8 10 6 6 4 8		1	do. do. do. WSP 1994, Blu.1 Blu.1 do. do. do. do. do. do. do. do. do.	2
963 964 965 966 967 968 969 970 971 972 973 974 975 976 980	6 7 18 5 9 8 10 6 4 8 4	r Creek at 1	1	do. do. do. WSP 1994, Blu.1 Blu.1 do.	
963 964 965 966 967 968 970 971 972 973 974 975 976 980	6 7 18 5 9 8 10 6 6 4 8 4 8 1		l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 969 970 971 972 973 974 975 980	6 7 18 5 9 8 10 6 4 8 4 8 1		l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
947 948	6 7 18 5 9 8 10 6 6 4 8 1 7167500 Otte ummary or in	terpretive	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 969 971 972 973 975 976 980 947 948 950	6 7 18 5 9 8 10 6 4 8 4 8 1		l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 970 971 972 973 974 975 980 947 948 950 951 952	6 7 18 5 9 8 10 6 6 4 8 4 8 1	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 9970 971 972 973 975 976 980 947 948 950 951 952	6 7 18 5 9 8 10 6 6 4 8 1 1 7167500 Otte ummary or in 4 13 3 4 1	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 9645 965 9666 967 968 9970 971 972 973 975 976 980 947 948 950 951 951 953 953	6 7 18 5 9 8 10 6 6 4 8 4 8 1 7167500 Otte ummary or in 4 13 3 4 1 1	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 970 971 973 974 975 980 977 980 9951 9951 9953 9953	6 7 18 5 9 8 10 6 6 4 8 1 7167500 Otte ummary or in 4 13 3 4 1 1 2 2	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
963 964 965 966 967 968 971 971 973 974 975 980 977 980 977 980 977 978 978 978 978 978 978 978	6 7 18 5 9 8 10 6 4 8 1 7167500 Otte ummary or in 4 13 3 4 1 1 2 2	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles
163 164 165 166 166 167 168 171 171 171 171 171 171 171 171 171 17	6 7 18 5 9 8 10 6 6 4 8 1 7167500 Otte ummary or in 4 13 3 4 1 1 2 2	terpretive p	l Climax, Kansa	do. do. do. WSP 1994, Blu.1 Blu.1 do.	Drainage area = 129 square miles

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Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	<u></u>	lumber of a	nalyses		Publication 1/ or office file 2/	Additional information
<i>yeu</i> :		i-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		
07	7167500 Otte	r Creek at	Climax,	Kansas.	Continued	
1960	9				Blu.1	
1961	9				do.	
1962 1963	7 2				do. do.	
1964	3				do.	
1965	15				do.	
1966	4 9		1		Blu.1, WSP 1994	
1967 1968	5				Blu.1	
1969	10				do.	
1970	5				do.	
1971 1972	4 6				do. do.	
1973	5				do.	
974	7				do.	
1975	6				do.	
1976 1977	2 1				do.	
1978	2				do. do.	
1980	5		1		WRD-KS, 1980, vol. 2	2; Blu.1
	ummary or in 36	iterpretive	publica	LIONS 2	Blu.1	
1969	48 22				do. do.	
1969 1970 07 Su	48 22 /168500 Fall ummary or in	River near	Fall Ri	iver, Ka	nsas : Blu.l, Col.1, Ost	
1969 1970 07 Su	48 22 /168500 Fall ummary or in	River near	Fall Ripublicat	iver, Ka tions 3/	nnsas : Blu.l, Col.l, Ost.	.1, USEng.1 Before Fall River Lake
1969 1970 07 St 1940 1941	48 22 /168500 Fall ummary or in	River near	Fall Ripublicat	iver, Ka	nsas : Blu.l, Col.1, Ost	.1, USEng.1
1969 1970 07 Su 1940 1941 1942 1943	48 22 7168500 Fall Immary or in 5 8 8 8	River near	Fall Ripublicat	iver, Ka tions 3/	nsas : Blu.l, Col.l, Ost. Blu.l do. do. do.	.1, USEng.1 Before Fall River Lake Do. Do. Do.
969 970 07 Su 940 941 942 943 944	48 22 7168500 Fall ummary or in 5 8 8 1 11	River near	Fall Ri publicat	iver, Ka tions 3/	nsas: Blu.l, Col.1, Ost. Blu.l do. do. do. do. do.	.1, USEng.1 Before Fall River Lake Do. Do. Do. Do. Do.
940 940 941 942 943 944 945	48 22 2168500 Fall ummary or in 5 8 8 1 11 30	River near	Fall Ri	iver, Ka tions 3/	do. insas : Blu.l, Col.l, Ost. Blu.l do. do. do. do. do. do.	.1, USEng.1 Before Fall River Lake Do. Do. Do. Do. Do. Do. Do.
940 941 942 943 944 945 946 947	48 22 /168500 Fall ummary or in 5 8 8 1 11 30 6 7	River near	Fall Ri	iver, Ka	nsas: Blu.l, Col.1, Ost. Blu.l do. do. do. do. do.	.1, USEng.1 Before Fall River Lake Do. Do. Do. Do. Do.
969 970 07 St 940 941 942 943 944 945 946 947 948	48 22 7168500 Fall mmary or in 5 8 8 1 11 30 6 7 11	River near	Fall Ripublicat	iver, Kations 3	do. nsas : Blu.l, Col.l, Ost. Blu.l do.	Before Fall River Lake Do.
940 941 942 943 944 945 946 947 948 949	48 22 2168500 Fall ummary or in 5 8 8 1 11 30 6 7 11 3	River near	Fall Ripublicat	iver, Kations 3	do. pnsas : Blu.l, Col.l, Ost. Blu.l do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 948 949 951	48 22 7168500 Fall mmary or in 5 8 8 1 11 30 6 7 11	River near	Fall Ripublicat	iver, Kations 3	do. nsas : Blu.l, Col.l, Ost. Blu.l do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 947 948 949 952 955	48 22 7168500 Fall mmmary or in 5 8 8 1 11 30 6 7 11 3 2 2 1 1 1	River near	Fall Ripublicat	iver, Kations 3	do. pnsas : Blu.l, Col.l, Ost. Blu.l do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 947 948 949 951 955 957	48 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	River near	Fall Ripublicat	iver, Kations 3	do. nsas : Blu.1, Col.1, Ost. do. do. do. do. do. do. do. do. do. d	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 948 949 951 952 955 957 958	48 22 7168500 Fall mmmary or in 5 8 8 1 11 30 6 7 11 3 2 2 1 1 1	River near	Fall Ripublicat	iver, Kations 3	do. insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 948 949 951 952 955 957 959 960	48 22 7168500 Fall mmmary or in 5 8 8 8 1 11 30 6 7 11 3 2 2 1 1 1 1 3 1 1 1 1 1 3 1 1 1 1	River near	Fall Ripublicat	iver, Kations 3	do. pnsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 948 949 955 957 958 959 960 961	48 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	River near	Fall Ripublicat	iver, Kations 길	do. nsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 955 955 957 958 959 960 961 962	48 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	River near	Fall Ripublicat	iver, Kations 길	do. nsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do. Do. Do. Do. Do. Do. Do. Do
969 970 07 St 940 941 942 943 945 946 947 948 955 955 955 957 958 959 960 961 962 963	48 22 2168500 Fall ummary or in 5 8 8 1 11 30 6 7 11 3 2 1 1 1 1 3 1 1 9 5 5 3	River near	Fall Ripublicat	iver, Ka tions 길	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 07 St 940 941 942 943 944 945 946 947 955 957 958 959 960 961 962 963 964 965	48 22 2 1 1 1 1 3 2 2 1 1 1 1 3 3 1 1 1 9 5 5 3 3 1 21 21	River near	Fall Ripublicat	iver, Ka tions 길	do. nsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 940 941 942 943 9445 946 947 948 949 955 957 958 959 960 961 962 963 964 965 966	48 22 2168500 Fall unwnary or in 5 8 8 1 11 30 6 7 11 3 2 1 11 3 1 1 9 5 3 1 21	River near	Fall Ripublicat	iver, Ka tions 길	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do. Do. Do. Do. Do. Do. Do. Do
969 970 940 941 942 943 944 945 946 947 948 951 952 955 958 959 960 961 962 963 964 965 966 967	48 22 2168500 Fall unwnary or in 5 8 8 1 11 30 6 7 11 3 2 1 1 1 1 9 5 3 1 21 1 2	River near	Fall Ripublicat	iver, Ka tions 길	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 940 941 942 943 944 945 946 947 951 955 957 958 960 961 962 963 964 965 966 967 968	48 22 2168500 Fall mmmary or in 5 8 8 8 1 11 30 6 7 7 11 3 2 1 1 1 1 3 1 1 1 1 9 5 5 3 3 1 1 21 1 1 2 2 5	River near	Fall Ripublicat	iver, Ka tions ≟/	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 940 941 942 943 9445 9445 9446 947 955 955 955 955 957 958 959 960 961 962 963 964 965 966 967 968 969 970	48 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	River near	Fall Ripublicat	iver, Ka tions ≟/	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do. Do. Do. Do. Do. Do. Do. Do
969 970 941 942 943 1944 1945 1944 1945 1946 1947 1948 1949 1955 1957 1958 1959 1960 1961 1965 1966 1967 1968 1969 1970 1971	48 22 2168500 Fall unwnary or in 5 8 8 1 11 30 6 7 11 3 2 1 11 3 1 1 2 1 1 1 1 8 5	River near	Fall Ripublicat	iver, Ka tions ≟/	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 941 942 944 944 945 946 947 948 949 951 955 957 958 960 961 962 963 964 965 966 966 967 968 969 971 972	48 22 2168500 Fall mmary or in 5 8 8 8 1 1 11 30 6 7 7 11 3 2 1 1 1 1 3 1 1 1 1 2 2 5 1 1 1 2 2 5 1 1 8 5 7 7	River near	Fall Ripublicat	iver, Ka	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 940 941 942 943 944 945 946 947 955 957 958 959 960 961 962 963 964 965 967 968 997 973	48 22 2168500 Fall Immary or in 5 8 8 1 11 30 6 7 11 3 2 1 1 1 1 1 1 2 5 3 1 1 1 1 1 1 1 1 2 5 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	River near	Fall Ripublicat	iver, Kations 3	do. nsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
969 970 941 942 943 944 945 946 947 948 949 955 955 958 959 960 961 962 963 964 965 966 967 968 970 971 972 973 974 975	48 22 7168500 Fall mmmary or in 5 8 8 1 11 30 6 7 7 11 3 2 1 11 1 9 5 3 1 21 1 1 2 5 11 8 5 7 12 22 6	River near	Fall Ripublicat	iver, Kations 3	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do.
St. 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1951 1955 1957 1958 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1971 1972 1973 1975	48 22 2168500 Fall mmary or in 5 8 8 8 1 1 11 30 6 7 7 11 3 2 2 1 1 1 1 2 2 5 11 8 5 7 7 12 22 6 6 7	River near	Fall Ripublicat	iver, Kations 3	do. nsas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do. Do. Do. Do. Do. Do. Do. Do. Do. Do
1969 1970 07 St 1940 1941 1942 1944 1945 1944 1945 1946 1947 1955 1957 1958 1959 1961 1962 1963 1964 1965 1966 1967 1969 1970 1971 1972 1973 1974	48 22 7168500 Fall mmmary or in 5 8 8 1 11 30 6 7 7 11 3 2 1 11 1 9 5 3 1 21 1 1 2 5 11 8 5 7 12 22 6	River near	Fall Ripublicat	iver, Kations 3	do. Insas : Blu.1, Col.1, Ost. Blu.1 do.	Before Fall River Lake Do. Do. Do. Do. Do. Do. Do. Do. Do. Do

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water		lumber of a	nalyses		Publication 1/or office file 2/	Additional information
/ear	Suspended Concen- tration	l-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files	
		River at l			s : Blu.1, Col.1, USE	Drainage area = 827 square miles ng.1
1939	1				B1u.1	Before Fall River Lake
1940	6				do.	Do.
1941 1942	13 13				do. do.	Do. Do.
1943	3				do.	Do.
1944	13 17				do.	Do.
1945 1946	1				do. do.	Do. Do.
1961	3	2			WSP 1884, Blu.1	Downstream from Fall River Lake
1965 1975	1 3				USCE-T Blu.1	Do. Do.
976	5				do.	Do.
Fa	11 River at	Neodesha,	Kansas			Drainage area = 848 square miles
1907	9/ 7 9/ 14				WSP 273	Before Fall River Lake
.908	<i>3</i> 14	 			do.	Do.
	169600 Elk	River at H		ansas		
1966			1		WSP 1994	
		River at E terpretive			s /: Blu.1, Ost.1	Drainage area ≈ 220 square miles
.967	.3				Blu.1	
1968 1969	12 23				do. do.	
1970						
	7				do.	
1971	4				do.	
1971 1972					do. do.	
1971 1972 1973 1974	4 5 14 14				do. do. do. do.	
1971 1972 1973 1974 1975	4 5 14 14 13				do. do. do. do. do.	
1971 1972 1973 1974 1975	4 5 14 14				do. do. do. do.	
1971 1971 1972 1973 1974 1975 1976 1977 1978	4 5 14 14 13 2		1		do. do. do. do. do.	
1971 1972 1973 1974 1975 1976 1977 1978 1980	4 5 14 14 13 2 3 1 3	River near	Elk Cit	y, Kans	do. do. do. do. do. do. wRD-KS, 1978; Blu.1 wRD-KS, 1980, vol.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su	4 5 14 14 13 2 3 1 3 170000 Elk mmary or ir	River near terpretive	Elk Cit	y, Kans 3	do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940	4 5 14 14 13 2 3 1 3 170000 Elk mmary or ir	River near	Elk Cit	y, Kans	do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942	4 5 14 14 13 2 3 1 3 170000 Elk mmary or ir	River near	Elk Cit	y, Kans	do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as 7: Blu.1, Col.1, Ost Blu.1 do. do. do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943	4 5 14 14 13 2 3 1 3 1 70000 Elk mmmary or ir	River near	Elk Cit	y, Kans tions 3	do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6	River near terpretive	Elk Cit	y, Kans tions 3	do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as 7: Blu.1, Col.1, Ost Blu.1 do. do. do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946	4 5 14 14 13 2 3 1 3 170000 Elk mmary or ir 5 13 3 9 5 6 5	River near terpretive	Elk Cit	y, Kans itions 3	do. do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do. do. do. do. do. do. do. do. do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6 5 5	nterpretive	Elk Cit	y, Kans itions 3	do. do. do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. **Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1945 1946 1947	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6 5 5 3	nterpretive	Elk Cit	ry, Kans itions 3	do. do. do. do. do. do. do. do. do. SyrD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6 5 5 5	River near nterpretive	Elk Cit	ry, Kans tions 3	do. do. do. do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951	4 5 14 14 13 2 3 1 3 170000 Elk mmary or ir 5 13 3 9 5 6 5 5 5 3 2 4 1	nterpretive	Elk Cit	ry, Kans itions 3	do. do. do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1949 1950 1951 1953 1953	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6 5 5 5 3 2 4 1 1 6	nterpretive	Elk Cit	ry, Kans itions 3	do. do. do. do. do. do. do. do. do. WRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953	4 5 14 14 13 2 3 1 3 1 70000 Elk mmary or ir 5 13 3 9 5 6 5 5 5 3 2 4 1 1 6	nterpretive	Elk Cit	y, Kansations 3	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1955	4 5 14 14 13 2 3 1 1 3 1 170000 Elk mmary or ir 1 5 13 3 9 5 6 5 5 5 5 3 2 4 1 1 6 6 2 2 2	nterpretive	Elk Cit	y, Kans	do. do. do. do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as 7: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1949 1953 1953 1954 1955 1957	4 5 14 14 13 2 3 1 3 3 1 3 3 9 5 6 5 5 5 3 2 2 4 1 1 6 2 2 2 13 9 9	nterpretive	Elk Cit	y, Kans	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1950 1951 1952 1953 1954 1955 1956 1957	4 5 14 14 13 2 3 1 1 3 3 1 770000 Elk mmary or ir 5 13 3 9 5 6 6 5 5 5 3 2 2 4 1 1 1 6 6 2 2 2 13 9 6	nterpretive	Elk Cit	y, Kans	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958	4 5 14 14 13 2 3 1 1 3 3 1 3 3 9 5 6 5 5 3 2 2 4 1 1 1 6 6 15	l 1 2	Elk Cit	y, Kans	do. do. do. do. do. do. do. do. MRD-KS, 1978; Blu.1 WRD-KS, 1980, vol. as /: Blu.1, Col.1, Ost Blu.1 do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1949 1950 1951 1953 1954 1955 1956 1957 1958 1959 1950 1951	4 5 14 14 13 2 3 1 1 3 3 1 3 9 5 5 6 5 5 5 3 2 2 4 1 1 6 2 2 2 13 9 6 15 23 15	nterpretive	Elk Cit	y, Kans	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963	4 5 14 14 13 2 3 1 1 3 3 170000 Elk mmary or ir 5 13 3 9 5 6 5 5 3 2 2 4 1 1 1 6 6 2 2 13 9 6 15 23 15 5	l 2	Elk Cit	y, Kans	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1963 1964	4 5 14 14 13 2 3 1 1 3 3 1 3 9 5 5 6 5 5 5 3 2 2 4 1 1 6 2 2 2 13 9 6 15 23 15	l 2	Elk Cit	y, Kans 3	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1949 1950 1951 1953 1954 1955 1956 1957 1958 1959 1959 1960 1961 1961 1962 1963 1964 1965 1966 1966	4 5 14 14 13 2 3 1 3 3 170000 Elk mmary or in 5 5 13 3 9 5 6 6 5 5 5 3 2 2 4 1 1 6 6 2 2 2 13 9 6 6 15 23 15 5 4 18 4	l 2	Elk Cit	y, Kans 3	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1978 1980 07 Su 1941 1942 1943 1944 1945 1945 1946 1947 1949 1950 1951 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1966 1967	4 5 14 14 13 2 3 1 3 3 170000 Elk mmary or in 5 5 13 3 9 5 6 6 5 5 5 3 2 2 4 1 1 6 6 2 2 2 13 9 6 6 15 23 15 5 4 18 4	l 2	Elk Cit publica	y, Kans 3	do.	2; Blu.1 Drainage area = 575 square miles
1971 1972 1973 1974 1975 1976 1977 1978 1980 07 Su 1940 1941 1942 1943 1944 1945 1946 1947 1949 1953 1954 1953 1954 1955 1956 1957 1958 1957 1958 1959 1960 1961 1962 1963 1965 1966	4 5 14 14 13 2 3 1 3 170000 Elk mmmary or ir 5 13 3 9 5 6 5 5 3 2 4 1 1 6 2 2 13 9 6 15 5 4 18	l 2	Elk Cit publica	y, Kans 3	do.	2; Blu.1 Drainage area = 575 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

- Particle in size	or office file2 Bed- Bank- mater- mater- mater mater- ial fal size size utflow near Independence, Kansublications 3/: Blu.1 do.	
lk River Lake on	ablications 3/: Blu.1 Blu.1 do. do. do. do. do. do. do. do. do. do	sas Drainage area 634 square miles
	do. do. do. do. do. do. do. do. do.	
	do. do. do. do. do. do. do.	
	do. do. do. do. do. do.	
	do. do. do. do. do. do.	
	do. do. do. do.	
	do. do. do. do.	
	do. do. do.	
	do.	
	uu.	
	Elk City Lake, Kansas ublications 3: Ost.1	
		Drainage area = 2,892 square miles
	B1 u • 1	Before large reservoirs
2	do. WSP 1884, Blu.1	Downstream from Fall River Lake Downstream from Toronto and Fall River Lak
		Drainage area = 37 square miles
, , , , , , , , , , , , , , , , , , ,	B1u.1	
	do.	
	do.	
	do.	
	-	
	do.	
	do.	
	do.	
	do.	
	do.	
	do.	
	do.	
erdigris River	at Coffeyville, Kansas	
	WSP 273 do.	Before large reservoirs Do.
	interpretive p	do. WSP 1884, Blu.1 ig Hill Creek near Cherryvale, Kansas interpretive publications 3: Blu.1, Ost.1, Blu.1 do. do. do. do. do. do. do. d

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	<u> </u>	umber of a	nalyses		Publication 1/or office file 2/	Additional information
edr	Suspended	-sediment	Bed-	Bank-	or office files	
	Concen-	Particle	mater-	mater-		
	tration	size	ial size	ial size		
	07172000 Cane	y River ne	ar Elgin	. Kansa	sContinued	
944	9	,	- -	,	B1 u. 1	
945	ž				do.	
1946	4				do.	
947	7				do.	
1948	4				do.	
949	1				do.	
1950	2				do.	
1951 1952	3 2				do. do.	
1953	1				do.	
1955	2				do.	
956	4				do.	
957	11				do.	
958	5				do.	
1959	3				do.	
1960	6				do.	
1961	15				do.	
962	3				do.	
1963	7				do.	
964	6				do.	
1965	9				do.	
966	7		1		WSP 1994, Blu.1	
967	5 11				Blu.1	
.968 .969	11 16				do. do.	
1970	5				do.	
971	3				do.	
972	11				do.	
973	13				do.	
1974	7				do.	
1975	12				do.	
976	4				do.	
1977	3			1	Blu.1, USGS-L	
1978	1				Blu.1	
1980			1		WRD-KS, 1980, vol. 2	
	07173300 Midd	le Caney C	reek at	Sedan,	Kansas	Drainage area ≈ 120 square miles
1966			1		WSP 1994	
	07174000 Cane	y Creek ne	ar Copan	, Kansa	s	
1980			1		WRD-KS, 1980, vol. 2	
	07174200 1 i++	le Caney R	iver hel	ow Cott	on Creek near Copan, I	Cansas
	Summary or in					MITAUS
1980			1		WRD-KS, 1980, vol. 2	
1982	1	1			WRD-KS, 1982	
1983	2				WRD-KS, 1983	
	07179400 Coun Summary or in				ar Council Grove, Kans : Blu.1	sas Drainage area = 246 square miles
1965	2				B1u.1	
1966	7				do.	
1967	1				do.	
1968	5				do.	
1969	7				do.	
1970	2				do.	
1971	2				do.	
1972 1973	3 2				do. do.	
1974	5				do.	
	8				do.	
19/7						
1975 1976	1				do.	
1975 1976 1978	1 2				do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

later		Number of an	alyses		Publication 1/ or office file 2/	Additional information
ear	Concen- Particle- mater- mat			Bank- mater-		
	tration	size	ial size	ial size		
07 St	7179500 Neos ummary or fi	sho River at	Council publicat	Grove,	Kansas : Blu.1, Col.1, Ost.	Drainage area = 250 square miles 1, USEng.1
940	4				B1 u. 1	Before Council Grove Lake
941	10				do.	Do.
942	15				do.	Do.
943	2				do.	Do.
944	12				do.	Do.
945	18				do.	Do.
946	3				do.	Do.
947	2				do.	Do.
950	1				do.	Do.
955	2				do.	Do.
956	i				do.	Do.
958	1				do.	Do.
959	6				do.	Do.
960	6				do.	Do.
961	2				do.	Do.
962	7				do.	Do.
963 964	2				do.	Do.
964 060	1 6				do. do.	Do. Downstream from Council Grove Lake
969 970	26				do.	Do.
971	20				do.	Do.
972	6				do.	Do.
978	1			2	Blu.1, USGS-L	Do.
979	i				Blu.1	Do.
981	ī				USCE-T	Do.
982	4				do.	Do.
Su	ummary or ir	nterpretive	publicat	ions 🛂		Drainage area = 55 square miles
Su 07	ummary or in 7179730 Neos	nterpretive sho River ne	publicat ar Americ	لکے ions us, Ka	: 0st.4	Drainage area = 55 square miles Drainage area = 622 square miles
Su 07 Su	ummary or in 7179730 Neos	nterpretive sho River ne	publicat ar Americ	ions 3/	: Ost.4 nsas	
964	ummary or in 7179730 Neos ummary or in	nterpretive sho River ne nterpretive	publicat ar Americ	ions 3/	: Ost.4 	Drainage area = 622 square miles
964 966 967	ummary or 1r 7179730 Neos ummary or 1r 7 7 1	nterpretive sho River ne nterpretive	publicat ar Americ	ions 3/	: Ost.4 nsas : Blu.1, Ost.1 WSP 1957, Blu.1	Drainage area = 622 square miles Before Council Grove Lake
964 966 967 968	7179730 Neos mmary or ir 7 1 7 1 7 11 9	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do.
964 966 967 968 969	ummary or 1r 7179730 Neos ummary or 1r 1 7 11 9 12	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do. Do.
964 966 967 968 969 970	Jummary or 1r 7179730 Neos Jummary or 1r 1 7 11 9 12	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4 nsas : Blu.1, Ost.1 WSP 1957, Blu.1 Blu.1 do. do. do. wSP 2146, Blu.1 Blu.1	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do. Do. Do. Do.
964 966 967 968 969 970 971	7179730 Neos mmary or ir 1 7 1 7 11 9 12 10	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do. Do. Do. Do. Do.
964 966 967 968 969 970 971	7179730 Neos mmary or ir 1 7 1 7 11 9 12 10 10	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do. Do. Do. Do. Do. Do.
964 966 967 968 969 970 971 972 973	7179730 Neos 7179730 Neos Jummary or 1r 1 7 11 9 12 10 10 10	nterpretive sho River ne nterpretive	publicat ar Americ	ions 2/	: Ost.4 msas : Blu.1, Ost.1 WSP 1957, Blu.1 do. do. WSP 2146, Blu.1 do. do. do. do. do.	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do. Do. Do. Do. Do. Do. Do. Do.
964 966 967 968 969 970 971 972 973 974	7179730 Neos 7179730 Neos Jummary or 1r 1 7 11 9 12 10 10 11 10	nterpretive sho River ne nterpretive	publicat ar Americ	cus, Ka	: Ost.4 nsas : Blu.1, Ost.1 WSP 1957, Blu.1 Blu.1	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975	7179730 Neos 7179730 Neos Jammary or ir 1 7 11 9 12 10 10 11 10 11	nterpretive sho River ne nterpretive	publicat ar Americ	us, Ka tions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 971 972 973 974 975	7179730 Neos 7179730 Neos ummary or ir 1 7 11 9 12 10 10 11 10 11 10 11	nterpretive sho River ne nterpretive	publicat ar Americ	us, Ka tions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975	7179730 Neos mmmary or ir 1 7 11 9 12 10 10 11 10 11 12 9 6	nterpretive sho River ne nterpretive	publicat ar Americ	cus, Kai	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 974 977 978	7179730 Neos 7179730 Neos ummary or ir 1 7 11 9 12 10 10 11 10 11 10 11	nterpretive sho River ne nterpretive	publicat ar Americ	cus, Kaions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 977 978 980	7179730 Neosummary or 1r 7179730 Neosummary or 1r 17 711 9 12 10 10 11 10 11 12 9 6 1	sho River ne sterpretive	publicat ar Americ publicat	cus, Kaions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 976 977 978	7179730 Neosummary or 1r 7179730 Neosummary or 1r 1 7 11 9 12 10 10 11 10 11 12 9 6 1 1 1	nterpretive sho River ne nterpretive	publicat ar Americ publicat	cus, kaions 3/	: Ost.4 msas : Blu.1, Ost.1 MSP 1957, Blu.1 Blu.1 do. do. do. do. do. do. do. d	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 977 978 980	7179730 Neosummary or 1r 7179730 Neosummary or 1r 17 711 9 12 10 10 11 10 11 12 9 6 1	sho River ne sterpretive	publicat ar Americ publicat	cus, kaions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Downstream from Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 976 977 978 980 Ne	7179730 Neosummary or ir 7179730 Neosummary or ir 1 7 11 9 12 10 10 11 12 9 6 1 1 1 12 9 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaions 3/	: Ost.4 msas : Blu.1, Ost.1 WSP 1957, Blu.1 Blu.1	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 976 977 978 980 Ne	7179730 Neosummary or ir 7179730 Neosummary or ir 1 7 11 9 12 10 10 11 12 9 6 1 1 1 12 9 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4 msas : Blu.1, Ost.1 WSP 1957, Blu.1 Blu.1	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 976 977 978 980 	2 29 9 6	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 967 971 972 978 977 978 980 Ne	2/179795 Cott	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4 msas : Blu.1, Ost.1 MSP 1957, Blu.1 Blu.1 do. do. do. do. do. do. do. d	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 976 977 978 980 Ne	2179795 Cott	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4 msas : Blu.1, Ost.1 WSP 1957, Blu.1 Blu.1	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 972 973 974 975 977 978 980 07 Su 971 972 973	2 29 9 6	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 971 972 978 908 971 972 973 974 975 976 977 977 978 997 997 997 997 997	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaions 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 969 970 971 973 974 975 977 978 980 	2179730 Neos 21mmary or 1r 211 210 10 10 11 12 29 66 1 1 1 29 66 1 1 27 27 29 7 29 7 20 20 20 20 20 20 20 20 20 20 20 20 20	at Emporia,	publicat ar Americ publicat Kansas	tus, Kaitons 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.
964 966 967 968 970 971 972 973 974 975 976 977 978 907 971 973 974 975 977 978 977 978	2 2 2 2 2	at Emporia,	publicat ar Americ publicat Kansas	tus, kaitons 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.
Su 077 Su 0775	2179730 Neos 21mmary or 1r 211 210 10 10 11 12 29 66 1 1 1 29 66 1 1 27 27 29 7 29 7 20 20 20 20 20 20 20 20 20 20 20 20 20	at Emporia,	publicat ar Americ publicat Kansas	tus, kaitons 3/	: Ost.4	Drainage area = 622 square miles Before Council Grove Lake Do.

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

water year		Number of an	alyses	Publication V or office file 2/	Additional information
		d-sediment Particle size	Bed- Bank- mater- mater ial ial size size		
07 Su	180000 Cot mmary or i	tonwood Rive nterpretive	r near Marion, publications 3	Kansas (listed as /: Blu.1, USEng.1	station 07179795 in Blumer, 1983) Drainage area = 329 square miles
940	14			Blu.1	Before Marion Lake
941 942	15 10			do. do.	Do.
942 944	15			do.	Do. Do.
945	24			do.	Do.
946	1			do.	Do.
947	5			do.	Do.
948 951	3 9			do. do.	Do. Do.
952	5			do.	Do.
957	3			do.	Do.
958	4			do.	Do.
959 060	3			do.	Do.
960 961	7 8			do. do.	Do. Do.
962	12			do.	Do.
963	6			do.	Do.
964	1	1		WSP 1957	Do.
965 966	3	1		Blu.1	Do.
966 967	1 5	1		WSP 1994, Blu.1 Blu.1	Do. Do.
68	ĭ	1		WSP 2096	Do.
07	180050 Mud	Creek near	Marion, Kansas		Drainage area = 165 square miles
964	1	1		WSP 1957	,
	•	·			
Ce	dar Creek,	Kansas NW1/	4 sec. 5, T. 1	3 S., R. 12 W.	
941	1			USBR-D	
Su	mmary or i		r near Florenc publications 3	/: Blu.1	Drainage area = 754 square miles
961 962	2 9			Blu.1 do.	
963	2			do.	
964	1			do.	
965	4			do.	
966 967	1 7			do.	
969	6			do. do.	
970	2			do.	
971	5			do.	
972 272	2			do.	
973 974	1			do. do.	
975	3			do.	
976	3			do.	
978 970	1		2	USGS-L	
979	1			Blu.1	
07 Su	180500 Ced	ar Creek nea nterpretive	r Cedar Point, publications 3	Kansas /: Blu.1, Col.1, Jo	Drainage area = 110 square miles pr.2, Ost.1, Ost.4, USEng.1
940	5			Blu.1	
941	7			do.	
942	8			do.	
943 944	2 16			do. do.	
945	38			do.	
946	4			do.	
947	4			do.	
948 951	1 7			do.	
951 952	7 4			do. do.	
957	1			do.	
958	4			do.	
959	4			do.	
960	5			do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

/ear		umber of an	alyses		Publication 1/ or office file 2/	Additional information	
	Suspended-sediment Bed- Bank- Concen- Particle mater- mater- tration size ial ial size size						
07	7180500 Ceda	r Creek nea	r Cedar	Point,	KansasContinued		
1961	6				Blu-1		
1962 1963	9 2				do. do.		
1964	2				do.		
965	3		1		Blu.1, USCE-T		
966	3		1		WSP 1994, Blu.1		
.967 .968	1 1				Blu.1 do.		
969	7				do.		
970	6				do.		
971	11 11				do.		
.972 .973	8				do. do.		
974	8				do.		
975	10				do.		
976	10				do.		
.977 .978	6 2				do. do.		
979	2				do.		
982	1	1			WRD-KS, 1982		
Su					: Blu.1, Col.1, USEng	Drainage area = 92 square miles .1	
940 9 4 1	3 9				Blu.1 do.		
942	8				do.		
944	14				do.		
945	36				do.		
946 966	5		1		do. WSP 1994		
					Falls, Kansas	Drainage area = 1,327 square miles	
944 958 959	7182000 Cott ummary or in 2 1 1					Drainage area = 1,327 square miles Before Marion Lake Do. Do. Do. Do.	
944 958 959 960 961	ummary or in 2 1 1 1 1	terpretive			: Col.1 USCE-T WSP 1884 do. do. do.	Before Marion Lake Do. Do.	
944 958 959 960 961 964	ummary or in 2 1 1 1 1 1				: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957	Before Marion Lake Do. Do. Do. Do. Do.	
944 958 959 960 961 964 968	ummary or in 2 1 1 1 1	terpretive			: Col.1 USCE-T WSP 1884 do. do. do.	Before Marion Lake Do. Do. Do. Do.	
944 958 959 960 961 964 968 971	ummary or in 2 1 1 1 1 1 1 1 1 1 7 182250 Cott	terpretive 1 1 onwood Rive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Doonstream from Marion Lake	
944 958 959 960 961 964 968 971	ummary or in 2 1 1 1 1 1 1 1 1 1 1 1 1 1 7182250 Cott	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Downstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake	
944 958 959 960 961 964 968 971 07 Su	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	terpretive 1 1 onwood Rive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965	7182250 Cott 107182250 Cott 11715 149	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Downstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967	7182250 Cott 17 15 14 9 19	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do.	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Do. Doratream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do. Do. Do. Do. Do.	
944 958 959 960 961 968 968 971 07 Su 963 964 965 966 967 968	7182250 Cott ummary or in 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do.	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 969	7182250 Cott in	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. do.	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Domnstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 969 969 971	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. do. WRD-KS, 1971; Blu.1	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 963 964 965 966 967 968 969 971 972	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 963 964 965 966 967 968 969 970 971 972 973	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do.	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Do. Domnstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do.	
944 958 959 960 964 968 971 	7182250 Cott ummmary or in 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 onwood Riverterpretive 1	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do.	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Do. Dosymptream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 971 972 973 974 975 975	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do. wRD-KS, 1975; Blu.1 Blu.1	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive 1	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. do. do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 Blu.1 do. do. do. do. do.	Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 9970 971 972 973 974 977 977 977	// 182250 Cott ummary or in 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 onwood Riverterpretive 1	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do. WRD-KS, 1975; Blu.1 Blu.1 do. do. WRD-KS, 1975; Blu.1	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Downstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do.	
944 958 959 960 961 964 968 971 07 Su 963 964 965 966 967 968 970 971 972 973 974 975 976 977	7182250 Cott 10 11 11 11 11 11 11 11 11 11 11 11 11	1 1 onwood Riverterpretive 1	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. do. do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 Blu.1 do. do. do. do. do.	Before Marion Lake Do. Do. Do. Do. Do. Do. Do. Downstream from Marion Lake Do. Drainage area = 1,740 square miles Before Marion Lake Do.	
944 958 959 960 961 964 968 971	7182250 Cott 27182250 Cott 27182250 Cott 27182250 Lott 2718225	1 1 onwood Riverterpretive 1	publicat	ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do. do. WRD-KS, 1975; Blu.1 Blu.1 do. WRD-KS, 1975; Blu.1 Blu.1 do. WRD-KS, 1975; Blu.1	Before Marion Lake Do.	
944 958 959 960 964 968 971 07 Su 963 964 965 966 967 968 9967 9971 972 973 974 975 975 977 978 979 9980 1982	7182250 Cott 1	1 1 onwood Riverterpretive 1 1 1 onwood Riverterpretive	r near P publicat	lymouth ions 3/	: Col.1 USCE-T WSP 1884 do. do. do. WSP 1957 WSP 2096 WRD-KS, 1971, part 2 , Kansas : Blu.1, Ost.1 Blu.1 WSP 1957, Blu.1 Blu.1 do. do. do. do. WRD-KS, 1971; Blu.1 Blu.1 do. wRD-KS, 1975; Blu.1 Blu.1 do. do. wRD-KS, 1979; Vol. 2; USCE-T do. dansas	Before Marion Lake Do.	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

07182390 8 Summary of 1942 1944 1945 07182400 Summary of 1946 1949 1950 1951 1952 1954 1955 1960 1957 1958 1960 1961 1962 1963 07182510 Summary of 1944 1961 1962 1963 1964 1967 1968 1967 1968 1967 1968 1967 1970 1971 1972 1973 1974 1975 1976 1977 1978 1980 07183000 Summary of	Neosho River at r interpretive 2 2 1 Neosho River or interpretive 2 4 7 9 6 1 1 1	publications at Strawn, K	er- e ds, Kansas 3: Blu.1 Blu.1 do. do. ansas s 3: Blu.1	Before Council Grove or Marion Lakes Do. Do. Drainage area = 2,933 square miles
Summary of 1942 1944 1945 1955 1956 1962 1963 1962 1963 1964 1965 1966 1967 1966 1967 1971 1978 1978 1970 1971 1978 1978 1980 07183000 Summary of 1944 1945 1977 1978 1980 07183000 Summary of 1944 1945 1946 1947	n interpretive 2 2 1 Neosho River or interpretive 2 4 7 9 6 1 1	publications at Strawn, K	3/: Blu.1 Blu.1 do. do. ansas s 3/: Blu.1	Do. Do.
07182400 Summary 0 1946 1949 1950 1950 1951 1952 1954 1955 1956 1957 1958 1960 1962 1963 07182510 Summary 0 1944 1965 1966 1967 1968 1969 1970 1971 1978 1978 1978 1978 1980 07183000 Summary 0	Neosho River or interpretive 2 4 7 9 6 1		do. do. ansas s <u>3</u> /: Blu.1	Do. Do.
07182400 Summary (1946 1949 1950 1951 1952 1955 1956 1957 1958 1960 1961 1962 1963 07182510 Summary (1944 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1977 1978 1980 07183000 Summary (1944 1945 1946 1947	Neosho River or interpretive 2 4 7 9 6 1		do. ansas s ½: Blu.1	Do.
07182400 Summary of 1946 1949 1950 1951 1952 1954 1955 1956 1957 1958 07182510 Summary of 1944 1961 1962 1963 1964 1965 1966 1967 1968 1968 1969 1970 1971 1978 1979 1971 1978 1980 07183000 Summary of	Neosho River or interpretive 2 4 7 9 6 1		ansas s ½: Blu.1	
Summary (1946) 949 949 950 951 952 954 955 956 957 958 960 961 962 963 07182510 Summary (1944 961 962 963 964 965 966 967 9968 9969 970 971 972 973 974 975 976 977 978 978 978 979 979 979 979 979 979	or interpretive 2 4 7 9 6 1		s <u>3</u> /: Blu.1	Drainage area = 2,933 square miles
949 950 951 952 954 955 956 957 958 960 961 962 963 07182510 Summary (944 961 962 963 971 964 965 966 967 971 978 978 978 978 978 978 978 978 978 978	4 7 9 6 1		01 1	
950 951 952 954 955 956 957 958 960 961 962 963 07182510 Summary of 1996 963 964 965 966 967 968 969 970 971 972 973 974 975 977 978 979 979 970 977 978 979 977 978 979 979 970 971 972 973 974 975 977 978 978 979 970 971 972 973 974 975 976 977 977 978 979 979 970 971 972 973 974 975 977 978 979 979 970 971 971 972 973 974 975 977 978 979 979 979 970 971 971 972 973 974 975 977 978 979 979 979 979 979 970 971 977 978 978 979 979 979 979 970 971 971 972 973 974 975 976 977 977 978 978 979 979 979 979	7 9 6 1		Blu.1	Before Council Grove or Marion Lakes
951 952 954 955 956 957 958 960 961 962 963 07182510 Summary (1996) 964 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 977 978 980 07183000 Summary (1996)	9 -6 1 1		do.	Do.
952 954 955 956 957 958 960 961 962 963 07182510 Summary of the second of t	-6 1 1		do.	Do.
954 955 956 957 958 960 961 962 963 07182510 Summary of 1962 963 964 965 966 967 971 978 989 970 971 972 973 974 975 977 978 980 07183000 Summary of 1971 979 979 979 979 979 979 979	1		do. do.	Do. Do.
955 956 957 958 960 961 962 963 07182510 Summary of 1962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 1978 940 944 945 946 947	1		do.	Do.
956 957 958 960 961 962 963 07182510 Summary (944 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary (940 944 945 946 947	-		do.	Do.
958 960 961 962 963 07182510 Summary of 1962 963 964 965 966 967 968 969 970 971 973 974 975 977 978 980 07183000 Summary of 1964 944 944 944 945 946 947	1		do.	Do.
960 961 962 963 07182510 Summary of 944 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 940 944 945 945 946 947	3		do.	Do.
961 962 963 07182510 Summary (944 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary (940 944 945 946 947	2		do.	Do.
962 963 07182510 Summary (944 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 977 978 980 07183000 Summary (944 945 946 947	2		do.	Do.
963 07182510 Summary (944 961 962 963 964 965 966 967 971 978 970 971 978 977 978 980 07183000 Summary (940 944 945 946 947	2 7		do. do.	Do. Do.
Summary (1944) 961 962 963 964 965 966 967 971 978 970 971 978 977 978 980 07183000 Summary (1940) 944 945 946 947	í		do.	Do.
961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 978 980 07183000 Summary 0 940 944 945 946	Neosho River a or interpretive			Drainage area ≈ 3,042 square miles Before John Redmond Reservoir
962 963 964 965 966 967 968 969 970 971 972 973 974 975 977 978 980 07183000 Summary of 944 944 945 946 946	3		do.	Do.
964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 944 944 945 946 947	16		do.	Do.
965 966 967 968 969 970 971 972 973 974 975 977 978 980 07183000 Summary (940 944 945 946	10		d o.	Do.
966 967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 944 944 944 945 946 947	10		do.	Downstream from John Redmond Reservoir
967 968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 940 944 945 945 946 947	9		do.	Do.
968 969 970 971 972 973 974 975 976 977 978 980 07183000 Summary of 940 944 945 945 946	10 14		do. do.	Do. Do.
969 970 971 972 973 974 975 976 977 978 980 07183000 Summary (940 944 945 946 947	11		do.	Do.
971 972 973 974 975 976 977 980 07183000 Summary of 940 944 945 945	7		do.	Do.
972 973 974 975 976 977 978 980 07183000 Summary of 940 944 945 945 946 947	10		do.	Do.
973 974 975 976 977 978 980 07183000 Summary (940 944 945 946 947	11		do.	Do.
974 975 976 977 978 980 07183000 Summary of 940 944 945 946 947	16		do.	Do.
975 976 977 978 980 07183000 Summary of 940 944 945 945 946	21 6		do. do.	Do. Do.
976 977 978 980 07183000 Summary of 940 944 945 945 946	12		do.	Do.
977 978 980 07183000 Summary (940 944 945 945 946 947	11		do.	Do.
980 07183000 Summary (940 944 945 945 946 947	9		do.	Do.
07183000 Summary of 940 944 945 946	4	1	Blu.1, USGS-L WRD-KS, 1980, vol	0o. . 2
940 944 945 946	Neosho River n		nsąs	Drainage area = 3,818 square miles
1944 1945 1946 1947	·	e publication	s ≟/: Blu.1, Col.1,	0-f 1
1945 1946 1947	3 2		Blu.1 do.	Before large reservoirs Do.
946 947	13		do.	Do.
947	8		do.	Do.
948	2		do.	Do.
	3		do.	Do.
949	4		do.	Do.
951 .952	7 6		do. do.	Do. Do.
.958	1 1		WSP 1884, Blu.1	Do.
1961	2 2		do.	Do.
1966 		1	WSP 1994, Blu.1	Downstream from John Redmond Reservoir
07183100		Piqua, Kans	as	Drainage area = 177 square miles
1969	Owl Creek near		WSP 2146	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

V0 3 0		Number of ar	nalyses		Publication1/ or office file2/	Additional information
ear.		d-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size	or office files	
	07183200 Neos Summary or i					Drainage area = 4,203 square miles
940	12				Blu.1	Before large reservoirs
	07183400 Flam Summary or in					Drainage area = 139 square miles
940 941	13 8				Blu.1 do.	
	07183500 Nec Summary or in					Drainage area = 4,905 square miles
958	1	1			WSP 1884, Blu.1	Before large reservoirs
.961 .962	3 1	1			do. Blu.1	Do. Do.
968	1				WSP 2096	Downstream from John Redmond Reservoir
.976 .977	12 10				WRD-KS, 1976; Blu WRD-KS, 1977; Blu	
978	8				WRD-KS, 1978; Blu	
979 980	11 11	1			WRD-KS, 1979, vol	
981	11				WRD-KS, 1980, vol WRD-KS, 1981	. 2; Blu.1 Do.
982	7	0			WRD-KS, 1982	Do.
983	8	8			WRD-KS, 1983	Do.
	07183600 Neos	sho River ne	ar Oswe	go, Kans		Drainage area = 5,230 square miles
907 908	<u>9</u> / 22 do. 6				WSP 273 do.	Before large reservoirs Do.
	0718 3800 Lime	stone Creek	near B	eulah, k	(ansas	Drainage area = 12 square miles
.979	1				WRD-KS, 1979, vol	. 2
	07184000 Ligh Summary or in	itning Creek iterpretive	near M publica	cCune, k	Kansas ': Blu.1, Col.1, 0	Drainage area = 197 square miles st.1, Ost.2, Ost.4, USEng.1
940	10				Blu.1	
941	8 11				do. do.	
0/2	5					
					do.	
943 944	17				do.	
943 944 945					do. do.	
943 944 945 946 966	17 12 3		1		do. do. do. WSP 1994	
943 944 945 946 966 969	17 12 3		1		do. do. do. WSP 1994 WSP 2146	.1
943 944 945 946 966 969 976	17 12 3 1 6 4		1		do. do. do. WSP 1994	
943 944 945 946 966 969 976 977	17 12 3 1 6 4 8		1		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978; Blu	.1
943 944 945 946 966 969 976 977 978	17 12 3 1 6 4		1		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978; Blu WRD-KS, 1979, vol	.1 .1 . 2; Blu.1
943 944 945 946 966 969 977 978 979 980 981	17 12 3 1 6 4 8 6 9 3		1		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1979, vol WRD-KS, 1980, vol WRD-KS, 1980, vol	.1 .1 . 2; Blu.1
943 944 945 946 966 969 977 978 979 980 981 982	17 12 3 1 6 4 8 6		1		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978; Blu WRD-KS, 1979, vol WRD-KS, 1980, vol	.1 .1 . 2; Blu.1
943 944 945 946 966 969 976 977 978 979 980 981 982	17 12 3 1 6 4 8 6 9 3 6 4		West M		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1977; Blu WRD-KS, 1978; Blu WRD-KS, 1979, vol WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983	.1 .1 . 2; Blu.1
	17 12 3 1 6 4 8 6 9 3 6 4 07184060 Deer Summary or ir		West M		do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978, Blu WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983 Kansas Blu.1 WRD-KS, 1977; Blu	.1 .2; Blu.1 .2; Blu.1 Drainage area = 1.5 square miles
943 944 945 946 966 967 977 978 979 981 982 983	17 12 3 1 6 4 8 6 9 3 6 4 07184060 Deer Summary or ir	terpretive	West M publica	tions3/;	do. do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978; Blu WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983 Kansas Blu.1 WRD-KS, 1977; Blu WRD-KS, 1978; Blu	.1 .2; Blu.1 .2; Blu.1 Drainage area = 1.5 square miles
943 944 945 946 969 977 978 979 980 981 982 983	17 12 3 1 6 4 8 6 9 3 6 4 07184060 Deer Summary or ir	terpretive	West M publica	tions3/;	do. do. do. do. WSP 1994 WSP 2146 WRD-KS, 1976; Blu WRD-KS, 1977; Blu WRD-KS, 1978; Blu WRD-KS, 1980, vol WRD-KS, 1981 WRD-KS, 1982 WRD-KS, 1982 WRD-KS, 1983 Kansas Blu.1 WRD-KS, 1977; Blu WRD-KS, 1978; Blu	.1 .2; Blu.1 .2; Blu.1 Drainage area = 1.5 square miles .1 .1 Drainage area = 7.0 square miles

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year		Number of a	nalyses			Publication 1/ or office file 2/		Additional information	
year	Suspended-sediment Bed-Bank- Concen-Particle mater-mater- tration size ial ial size size		01 01716C 71162						
	07184080 Dee Summary or i							Drainage area = 12 square miles	
1977 1978	2 4				WRD-KS, WRD-KS,				
	07184100 Lig Summary or i							Drainage area = 250 square miles	
1977 1978 1979	7 2 1				WRD-KS, WRD-KS, WRD-KS,	1978;	Blu.1		
	07184220 Che Summary or i							Drainage area = 27 square miles	
1977 1978 1979	8 11 2	1	1		WRD-KS, WRD-KS, WRD-KS,	1978;		81u.1	
	07184240 Lit Summary or i						ış	Drainage area = 34 square miles	
1977 1978	7 5	1	1		WRD-KS, WRD-KS,				
	07184300 Che Summary or i					*		Drainage area = 90 square miles	
1977 1978 1979 1980 1981	13 15 7 7 3	1				1978; 1979, 1980,			
	07184500 Lab Summary or i					, Col.1	l, USEng.	Drainage area = 211 square miles	
1940	6				Blu.1				
1941	10				do.				
1942 1943	12 8				do. do.				
1944 1945	13 5				do. Blu.1, t	SCE-T			
	07184590 Neo Summary or f								
1978	1				Blu.1				
	07184600 Fly Summary or f							Drainage area = 27 square miles	
1977	1				WRD-KS,	1977;	Blu.1		
	07186010 Sec Summary or i							Drainage area ≈ 60 square miles	
1977	11	2			WRD-KS,	1977;	Blu.1		
1978 1979	8 1	1			WRD-KS, WRD-KS.		Blu.1 vol. 2;	Blu.1	
	ī						vol. 2;		

Table 5.-- Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	·	lumber of a	nalyses		Public or offic			Additional information	
, car		l-sediment Particle size	Bed- mater- ial size	Bank- mater- ial size		-G 111			
	07186020 Firs Summary or i							Drainage area = 30 square miles	
1977 1978 1980	2 2 1	1			WRD-KS, WRD-KS, WRD-KS,	1978;		Blu.1	
	07186025 East Summary or it							Drainage area = 7.5 square miles	
1977 1978	1 2				WRD-KS, WRD-KS,				
	07186030 East Summary or in							Drainage area = 43 square miles	
1977	7				WRD-KS,				
1978 1979	3					1979,	vol. 2;		
1980	1				WRD-KS,	1980,	vol. 2;	B7u.1	
	07186040 Cow Summary or in				/: Blu.1			Drainage area = 170 square miles	
1977 1978	13 15	1			WRD-KS, WRD-KS,				
1979	9	•			WRD-KS,	1979,	vol. 2;		
1980 1981	8 2				WRD-KS,		vol. 2;	Bin.1	
	07186050 Brus Summary or i							Drainage area = 30 square miles	
1977	1				WRD-KS,				
1978 1979	3 2					1979,	vol. 2;		
1980	1				WRD-KS,	1980,	vol. 2;	Blu.1	
	Spring River	at Baxter	Springs,	Kansas				Drainage area = 1,890 square miles	
1907 1908	29 5				WSP 273 do.				
	3702250944426	500 Willow	Creek at	Baxter	Springs	, Kans	as		
1979	1				WRD-KS,	1979,	vol. 2		
	370503094382	200 Short C	reek at	Galena,	Kansas				
1978	1				WRD-KS,		. 1 . 2		
1979 1981	1				WRD-KS, WRD-KS,		vol. 2		
	370530095025	300 Cherry	Creek 3	miles w	est of F	aulkne	r, Kansa	S	
1978	1				WRD-KS,	1978			
	370618095012	701 Center	Creek 6.	5 miles	southwe	st of	Hallowel	1, Kansas	
1978	1				WRD-KS,				
	370621095024	900 Cherry	Creek 2	miles w	est of F	aulkne	r, Kansa	s	
1978	1				WRD-KS,	1978			

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Water year	Num	ber of ana	lyses		Publication 1/ or office file 2/	Additional information	
, cu	Suspended-s				_		
	Concen- Particle mater- mater- tration size ial ial size size						
	370802094565201	Tributary	to Cher	ry Cre	ek 5.5 miles north	east of Hallowell, Kansas	
1978	1				WRD-KS, 1978		
	370803095013601	Cherry Cr	eek 4.5	miles	southwest of Hallo	well, Kansas	
1978	1			!	WRD-KS, 1978		
	370957095034400	Neosho Ri	iver 2 mi	1es ea	st of Oswego, Kans	as	
1978	1				WRD-KS, 1978	Downstream from John Redmond Reservoir	
	371020094572701	Denny Bra	nch Cree	k 3 mi	les east of Hallow	ell, Kansas	
1978	1			!	WRD-KS, 1978		
	371132094581801	Cherry Cr	eek 2 mi	les no	rtheast of Hallowe	11, Kansas	
1978	1				WRD-KS, 1978		
	3712 22094573 100	Cherry Cr	eek 3 mi	les no	rtheast of Hallowe	11, Kansas	
1979	1		1		WRD-KS, 1978		
	371310094530801	Tributary	to Litt	le Che	rry Creek 6.5 mile	s south of West Mineral, Kansas	
1978	1				WRD-KS, 1978		
	371323094521201	Tributary	to Litt	1e Che	rry Creek 7.5 mile	s southeast of West Mineral, Kansas	
1978	1				WRD-KS, 1978		
	371323094534101	Tributary	to trib	utary	to Little Cherry C	reek 5.5 miles south of West Mineral, Kansas	
1978	1				WRD-KS, 1978		
	371320094391100	Cow Creel	near La	wton,	Kansas		
1977	1				WRD-KS, 1977		
	373747094380200	Cox Creel	(1 mile	south	of Arcadia, Kansas		
1977	1				WRD-KS, 1977		
	374109094370400	Cox Creek	c 2 mile	north	of Arcadia, Kansas		
1977	1				WRD-KS, 1977		
	37141409452410	0 Little (Cherry Cr	eek 4	miles southeast of	West Mineral, Kansas	
1 9 78	1				WRD-KS, 1978		
	371415096274100	Caney Riv	er near	Clover	dale, Kansas		
196 6			1		WSP 1994		

Water	r Num	ber of analyses	Publication 1/	. Additional information
year	Suspended-s Concen- Pa	ediment Bed- rticle mater- size ial	Publication 1/or office files Bank- mater- ial size	2/
	371502094551101	Tributary to Cher	ry Creek 1.5 miles sou	ith of West Mineral, Kansas
1978	1		WRD-KS, 1978	
1978	371514094541700 1	Cherry Creek 2 mi	les southeast of West WRD-KS, 1978	Mineral, Kansas
	371554094544701	Tributary to Cher	ry Creek 2 miles south	of West Mineral, Kansas
1978	1		WRD-KS, 1978	
	371600094502000	Little Cherry Cre	ek 2 miles southwest o	of Scammon, Kansas
1978	1		WRD-KS, 1978	
	371652094531800	Cherry Creek 2 mi	les east of West Miner	al, Kansas
1978	1		WRD-KS, 1978	
	371738094482801	Little Cherry Cre	ek 1.5 miles northeast	of Scammon, Kansas
1978	1		WRD-KS, 1978	
	371805094520601	Cherry Creek 4 mi	les northeast of West	Mineral, Kansas
1978	1		WRD-KS, 1978	
	373747094380200	Cox Creek 1 mile	south of Arcadia, Kans	as
1978	1		WRD-KS, 1978	
	374946095580000	Verdigris River n	ear Quincy, Kansas	
1966		1	WSP 1994	
	375510096231700	East Branch Fall	River near Lapland, Ka	nsas
1966		1	WSP 1994	
	375559098243600	North Fork Ninnes	cah River near Sylvia,	Kansas
1966		1	WSP 1994	
	380914100271300	Pawnee River near	Kalvesta, Kansas	
1966		1	WSP 1994	
	381000096094900	North Branch Verd	igris River near Seele	y Corner, Kansas
1966		1	WSP 1994	
	201606000543000	Dayman Divisa acco	letmone Valle	
1966	381608099542200	Pawnee River near	WSP 1994	
	20202212121			
1966		Whitewoman Creek	near Modoc, Kansas WSP 1994	
		<u> </u>	2557	

Table 5.--Inventory of sediment data for streams in Kansas and adjacent areas through 1983--Continued

Publication 1/ Water Number of analyses Additional information or office file2/ year Suspended-sediment Bed- Bank-Concen- Particle mater- matertration size ial ial size size 382212097592100 Little River near Windom, Kansas 1966 1 MCD 1994 382423094512100 Middle Creek near Fontana, Kansas 1981 WRD-KS. 1981 382449096063500 Neosho River near Emporia, Kansas 1966 1 WSP 1994 Downstream from Council Grove Lake 1. Publications -- data:

WRD-KS = U.S. Geological Survey, Water resources data for Kansas [year]
WRD-NE = U.S. Geological Survey, Water resources data for Nebraska [year]
WSP = U.S. Geological Survey Water-Supply Paper [volume number]
SSMR = Suspended sediment in the Missouri River, 5-year data publication by
U.S. Army Corps of Engineers, Omaha, Nebraska
Blu.1 = Blumer, 1983
HD-238 = U.S. Congress, House Document 238, 1934

2. Office files:

SCS = U.S. Soil Conservation Service, Salina, Kansas, or Lincoln, Nebraska USBR-D = U.S. Bureau of Reclamation, Denver, Colorado USCE-A = U.S. Army Corps of Engineers, Albuquerque, New Mexico USCE-KC = U.S. Army Corps of Engineers, Kansas City, Missouri USCE-O = U.S. Army Corps of Engineers, Omaha, Nebraska USCE-T = U.S. Army Corps of Engineers, Tulsa, Oklahoma USGS-L = U.S. Geological Survey, Lawrence, Kansas USGS-LN = U.S. Geological Survey, Lincoln, Nebraska

3. Publications--summary or interpretive reports:

Alb.1 = Albert, 1969
Alb.2 = Albert and Stramel, 1966
Bev.1 = Bevans, 1982
Blu.1 = Blumer, 1983
Car.1 = Carswell, 1981
Col.1 = Collins, 1965
Jor.1 = Jordan, Jones, and Petri, 1964
Jor.2 = Jordan, 1979
Mun.1 = Mundorff and Scott, 1964
Ost.1 = Osterkamp, 1977a
Ost.2 = Osterkamp, 1977b
Ost.3 = Osterkamp, Curtis, and Crowther, 1982
Ost.4 = Osterkamp, 1978
Ost.5 = Osterkamp and Hedman, 1982
Tas.1 = Task Force on Sedimentation, 1969
USEng.1 = U.S. Engineer Office, 1946

- 4. Publication gives daily record of suspended-sediment discharge for part of year.
- 5. Publication gives daily record of suspended-sediment discharge for the full year.
- 6. Monthly weighted mean.
- Publication includes daily record of mean suspended-sediment concentration and suspended-sediment discharge for part of the year.
- Publication includes daily record of suspended-sediment concentration and suspended-sediment discharge for the full year.
- 9. Composites of samples collected at different times.
- Surface samples.
- 11. Sets of point-integrated samples analyzed for suspended-sediment concentration and particle size.